



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10
SEATTLE, WASHINGTON 98101

AUG 3 1987

REPLY TO
ATTN OF: 000

MEMORANDUM

SUBJECT: Review of Chem-Security's April 15, 1987
TSCA/PCB Report

FROM: Bruce Long, E.P.S.
Oregon Operations Office

TO: Gil Haselberger, Chief
Toxic Substances Branch - AT-093

Bill Hedgebeth, Toxic Branch
PCB Compliance - AT-093

THRU: Chip Humphrey, Hazardous Waste Coordinator
Oregon Operations Office

I have reviewed the April 15, 1987 TSCA (PCB) report for Chem-Security System, Inc., Arlington, Oregon. Based on the information secured by the inspection team, no violation of the Letter of Approval and 40 CFR 761 was found.

Some concerns regarding the waste acceptance procedures were addressed in the report. According to the current Letter of Approval, these concerns are not in violation of the approved waste acceptance procedure.

It has been noted in both the November 1986 and April 1987 inspection reports that RCRA hazardous wastes have been reported by CSSI to contain PCB greater than 50 ppm. Under the current RCRA waste acceptance procedure at CSSI, all waste streams are tested before shipping to CSSI. When the shipment arrives at the Arlington site, a fingerprint analysis is done on a small portion of the shipment. On a number of occasions, an industrial sludge shipment was reported by CSSI to contain PCB greater than 50 ppm.

Based on the waste tracking records, CSSI remanifested RCRA/PCB shipments and later placed them in the TSCA landfill. However, only those drums or portions of the load that tested positive on the PCB's were landfilled in the PCB portion of the landfill. If a portion of the load was not tested as part of the waste acceptance procedure, that portion of the load was reported to have passed the fingerprint analysis procedures and placed in the RCRA portion of the landfill.

The waste tracking records do not show that individual drums were resampled when composite samples tested positive (over 50 ppm). This could result in some drums of industrial sludge being placed in a landfill with PCB's greater than 500 ppm. According to 40 CFR, Part 761.60(a) (1), PCB must be incinerated unless otherwise provided; the intent of the regulations are that industrial sludges be disposed of based on their PCB concentration -- 50 to 500 at approved chemical landfills. -- over 500 must be incinerated regardless of their physical state.

It would be recommended that the waste acceptance procedure be reviewed for both the RCRA waste and the TSCA waste and provide a procedure to address these discrepancies. Based on the documentation provided by CSSI, a violation of the above-sited rule has not been documented.

cc: Chuck Rice, Seattle - HW 112

DRAFT: SEPTEMBER 18, 1987

Expiration Date:

Page 1 of 70 Pages

**Approval to Landfill
Polychlorinated Biphenyls (PCBs)**

U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue, HW-112
Seattle, Washington 98101
Telephone: (206) 442-1236

Issued in accordance with the provisions of Section 6(e)(1) of the Toxic Substances Control Act of 1976, 15 USC §2605(e)(1), and the Federal PCB Regulations, 40 CFR §761.75(c).

ISSUED TO: Chem-Security Systems, Incorporated
Star Route
Arlington, Oregon 97812
Telephone: (503) 454-2643

This approval is effective as of _____, and shall remain in effect until _____, unless rescinded for failure to comply with the terms and conditions herein, failure to disclose all relevant facts or for any other reasons which the Regional Administrator of Environmental Protection Agency (EPA) Region 10 deems necessary to protect public health and the environment. This approval on its effective date supercedes, replaces and renders void the March 25, 1982, PCB Landfill Approval (including any subsequent revisions) and the May 22, 1987, Temporary PCB Landfill Approval (including any subsequent revisions).

ISSUED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 10

Charles E. Findley, Director
Hazardous Waste Division
Environmental Protection Agency

Date _____

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DRAFT: SEPTEMBER 18, 1987

Expiration Date:

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INTRODUCTION

Permittee: Chem-Security Systems, Incorporated

Pursuant to Section 6(e)(1) of the Toxic Substances Control Act of 1976 (TSCA), 15 USC §2605(e)(1), and the Federal PCB Regulations, 40 CFR Part 761, an approval (hereafter referred to as a permit) is issued to Chem-Security Systems, Incorporated (hereafter referred to as Permittee), to operate a polychlorinated biphenyl landfill facility located in Gilliam County at Arlington, Oregon, on Cedar Springs Road, at latitude 45° 37' 30" and longitude 120° 22' 30".

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein including those in Attachments 1 through 18. The Permittee must comply with all applicable state regulations, and the rules of the Public Utility Commissioner, the Workers' Compensation Department, State Health Division, and other state agencies having jurisdiction over the facility. Additionally, the Permittee must comply with all applicable federal regulations in 40 CFR Parts 260 through 266, Part 268, Part 270 and Part 761.

This permit is based upon the administrative record which includes information submitted in the current revised TSCA PCB Operation Plan (hereafter referred to as the PCB permit application) and RCRA permit application. The Permittee's failure in the PCB or RCRA permit application or during the permit issuance process to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts at any time is grounds for the termination or modification of this permit and initiation of an enforcement action. The Permittee must inform EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

LIST OF ATTACHMENTS

The following documents are excerpts from the Permittee's PCB and RCRA permit applications. The listed documents are hereby incorporated, in their entirety, by reference as Attachments to this permit. The Agency has, as deemed necessary, modified specific language in the Attachments. These changes are described in the permit conditions (Sections I through V), and thereby supercede the language of the original Attachment.

Attachment 1 Facility site plan and map of facility location, consists of:

Figure 1-1 and Figure 1-2 of PCB permit application, as last revised March 1987.

Attachment 2 Waste Analysis Plan, consists of:

(a) Section 2 of PCB permit application, as last revised December 15, 1986.

(b) Sections 1.0, 2.0 (excluding subsections 2.2.3), 3.0, 4.0, 5.0, Table 6-1 (pages 36 and 37), 6.3, Appendix WAP-A, Appendix WAP-B, Appendix WAP-C of Exhibit 2 of RCRA permit application, as last revised June 1987.

Attachment 3 Security Procedures, consists of:

Section 3.1.2.5, including Figure 1-2, of PCB permit application, as last revised September 13, 1985.

Attachment 4 Inspection Plan, consists of:

(a) Section 9.0 of PCB permit application, as last revised March 1987.

- (b) Sections 3.0, 4.6, 4.10, Figures A-1 through A-13, A-24 through A-26, A-36 through A-37 of Exhibit 3 of RCRA permit application, as last revised June 1987.

Attachment 5

Training Plan, consists of:

- (a) Page 8-1 of PCB Permit Application, as last revised March 1987.
- (b) Exhibit 9 of the RCRA permit application, as last revised May 1987.

Attachment 6

Hazards Prevention, consists of:

- (a) Sections 3.1.2.2 and 3.1.2.3 of PCB permit application, as last revised March 1987.
- (b) Section E of the RCRA permit application, as last revised May 1987.

Attachment 7

Contingency Plan, consists of:

- (a) Section 7.2 of the PCB Permit Application, as last revised July 1985.
- (b) Exhibit 8 of RCRA permit application, as last revised June 1987 including:
- Appendix CP-1: Waste Facility Inventory;
 - Appendix CP-2: Future Facility Plan; and,
 - Appendix CP-3: Process Specific Containment and Control Procedures, pages CP-3-30 through CP-3-33
 - Appendix CP-4: Equipment and Vehicle Inventory.
- (c) Subpart G - PCB Spill Cleanup Policy consisting of §§761.120, 761.123, 761.125, 761.130 and 761.135, 52 FR 10688, April 2, 1987.

Attachment 8

Recordkeeping and Reporting, consists of:

Section 6 of the PCB permit application, as last revised March 1987.

Attachment 9

Closure and Post-closure Plans, consists of:

Appendix C of the PCB Permit Application, as last revised March 1987.

Attachment 10

Closure Cover Design Details, consists of:

- Exhibit 20A: Final cover design, Landfills L-1, 3, 5, & 6;
- Exhibit 20B: Closure cover design, Landfills L-7, 8, 9, 10, & 12; and,
- Exhibit 20C: Closure cover design, Landfill L-13.
(Exhibit 20A, 20B, and 20C of the RCRA permit application, as last revised May 1987).

Attachment 11

Landfill/Impoundment Technical Specifications, consists of:

- Exhibit 16A: Technical Specifications: Landfill L-13;
- Exhibit 16C: Technical Specifications: Landfill L-13 Cells 1 and 2 (modifies Exhibit 16A); and,
- Exhibit 16D: Technical Specifications: Landfill L-13 Cells 3 through 6 (modifies Exhibit 16C).
(Exhibits 16A, 16C, and 16D of the RCRA permit application, as last revised May 1987).

Attachment 12

Soil Liner Details, consists of:

- Exhibit 7B: Quality Assurance Manual for the Installation of Soil Components of Linings and Final Cover Systems.
(Exhibit 7B of the RCRA permit application, as last revised June 1986).

Attachment 13

Synthetic Liner Details, consists of:

- Exhibit 5B: Specification Guidelines for the Procurement and Installation of High Density Polyethylene Geomembranes; and,
- Exhibit 5C: Quality Assurance Manual for the Installation of High Density Polyethylene Geomembranes. (Exhibits 5B and 5C of the RCRA permit application, as last revised June 1986).

Attachment 14

Response Action Plans, consists of:

- Exhibit 21A: Response Action Plan for Landfill L-13, Cells 1 and 2 of the RCRA permit application, last revised April 1987.

Attachment 15

Landfills -- Design and Operation, consists of:

- (a) Sections 3.2, 4.0 and 5.2 of the PCB permit application, as last revised March 1987.
- (b) Section D.7 of RCRA permit application, as last revised June 1987.

Attachment 16

Landfill Drawings and Reports, consists of:

- (a) Appendix B-1, Engineering Drawings B-1-1 through B-1-7 of the PCB permit application, as last revised March 1987.
- (b) Exhibit 6B, excluding "Construction Drawings Landfill 12", of RCRA permit application, as last revised June 1987).

Attachment 17

Surface Water Management Plan, consists of:

Section D.10 of the RCRA permit application, as last revised March 1987.

Attachment 18

Groundwater Monitoring Program, consists of:

- Exhibit 10 Section 4: Design and Construction of Groundwater Monitoring System;
- Exhibit 10 Section 5: Groundwater Sampling and Analysis;
- Exhibit 10 Section 6: Detection Monitoring Program;
- Exhibit 10 Section 7: Groundwater Monitoring Data Evaluation; and,
- Exhibit 10 Appendix C: Manual for Groundwater Sampling (Waste Management, Inc.).

(Exhibit 10 of the RCRA permit application, as last revised July 1987).

DEFINITIONS

For purposes of administering this EPA permit, the following definitions shall apply:

- a. The terms "permit" and "approval" shall mean an EPA approval issued pursuant to 40 CFR §761.75(c).
- b. The term "Agency" shall mean the U.S. Environmental Protection Agency, Region 10, (with the address as specified on page one of this permit).
- c. The terms "Regional Administrator", "Director", "Department", or "Administrator" shall mean the Regional Administrator of EPA Region 10 or a designated representative. The Director, Hazardous Waste Division, EPA Region 10 (with the address specified on page one of this permit) is duly authorized and the "designated representative" of the Regional Administrator for purposes of this permit.
- d. The terms "facility" or "site" shall mean the physical description of the property (including structures, appurtenances and improvements) used to manage PCBs for land disposal. This description is as set forth in Attachment 1 of this permit.
- e. All definitions contained in 40 CFR §761.3 are incorporated in their entirety by reference into this permit, except that any of the definitions above, (a) through (d), shall supercede any definition of the same term given in 40 CFR §761.3.

I. STANDARD CONDITIONS

I.A. Effect of Permit

- I.A(1) The Permittee is authorized to landfill PCBs in accordance with the conditions of this permit. Any landfilling of PCBs by the Permittee at this facility that is not authorized by this permit is prohibited.

I.B. Personal Liability

- I.B(1) The Permittee shall hold harmless and indemnify the United States, the Agency, and officers, employees and agents of the United States from any claim, suit, or action arising from the activities of the Permittee or its contractors, agents, or employees under this permit.

I.C. Personal and Property Rights

- I.C(1) This permit does not convey any property rights of any sort or any exclusive privilege, nor any injury to private property or any invasion of personal rights, and does not authorize any violation of federal, state, or local laws or regulations.

I.D. Permit Actions

- I.D(1) This permit may be modified, revoked and reissued, or terminated by the Agency for failure to comply with the terms and conditions herein, failure to disclose all relevant facts or for any other reasons which the Regional Administrator of EPA Region 10 deems necessary to protect public health and the environment.

- I.D(2) The filing of a request for a permit modification, or revocation, or termination, or a notification of planned changes or anticipated noncompliance on the part of the Permittee shall not stay the applicability or enforceability of any permit condition.

I.E. Severability

- I.E(1) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. Invalidation of any federal statutory or regulatory provision which forms the basis for any condition of this permit does not affect the validity of any other federal statutory or regulatory basis for said condition.
- I.E(2) In the event that a condition of the permit is stayed for any reason, the Permittee shall continue to comply with the related applicable and relevant requirements in the March 25, 1982, PCB Landfill Approval (including any subsequent revisions) and the May 22, 1987, Temporary PCB Landfill Approval (including any subsequent revisions).

I.F. Duty to Comply

- I.F(1) The Permittee shall comply with all conditions of this permit. Any permit noncompliance, constitutes a violation of TSCA and is grounds for enforcement action, for permit termination, revocation, modification, or denial of a permit renewal application.
- I.F(2) Compliance with the terms of this permit does not constitute a defense to any action brought under Section 15(1) and 16(a) of TSCA (15 U.S.C. §§2614 and 2615(a)), Sections 3013 and 7003 of RCRA (42 U.S.C. §§6934 and 6973), Section 106(a) of the

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) [42 U.S.C. §9606(a)], as amended by the Superfund Amendments and Reauthorization Act of 1986, or any other law governing protection of public health or the environment from any imminent and substantial endangerment to human health or the environment.

I.G. Duty to Reapply

- I.G(1) If the Permittee desires to continue an activity regulated by this permit, or if the Permittee is required to continue post-closure care, the Permittee must reapply for and obtain a new permit.

I.H. Permit Expiration

- I.H(1) This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a complete permit application (see 40 CFR §761.75(c)(1 and 2)) at least 180 days before the expiration date of the effective permit, unless permission for a later date has been granted by the Regional Administrator, and, through no fault of the Permittee, the Regional Administrator has not taken final action with regard to the application.

II. Need to Halt or Reduce Activity not a Defense

- I.I(1) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

I.J. Duty to Mitigate

- I.J(1) In the event of noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases of PCBs to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

I.K. Proper Operation and Maintenance

- I.K(1) The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems as necessary to maintain compliance with the conditions of the permit.

I.L. Duty to Provide Information

- I.L(1) The Permittee shall furnish to the Regional Administrator, upon request, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

I.M. Inspection and Entry

- I.M(1) The Permittee shall allow the Regional Administrator, or authorized representatives, upon the presentation of credentials and other documents as may be required by law, to:

- I.M(1)(a) Promptly enter at reasonable times upon the Permittee's premises where the PCB landfill activity is located or conducted, or where records must be kept under the conditions of this permit;
- I.M(1)(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- I.M(1)(c) Promptly inspect at reasonable times any portion of the facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- I.M(1)(d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by TSCA, any substances or parameters at any location.

I.N. Monitoring and Records

- I.N(1) Samples and measurements taken by the Permittee for the purpose of monitoring shall be representative of the monitored activity.
- I.N(2) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, certification, or recording unless a longer retention period for certain information is required by other conditions of this permit. This period may be extended by request of the Regional Administrator at any time. The Permittee shall maintain the records as required by 40 CFR §761.180(b), 40 CFR §761.180(f),

from all groundwater monitoring wells, leachate collection systems, and associated groundwater surface elevations and burial coordinates of PCB wastes, during the operation through the end of the postclosure period for each PCB landfill unit.

I.N(3) Records for monitoring information shall include:

I.N(3)(a) The date, exact place, and time of sampling or measurements;

I.N(3)(b) The name, title, and affiliation of the individual(s) who performed the sampling or measurements;

I.N(3)(c) The date(s) analyses were performed;

I.N(3)(d) The name, title, and affiliation of the individual(s) who performed the analyses;

I.N(3)(e) The analytical techniques or methods used; and

I.N(3)(f) The results of such analyses, including QA/QC summary.

I.O. Reporting Planned Changes

I.O(1) The Permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility.

I.P. Certification of Construction or Modification

I.P(1) The Permittee may not commence disposal of PCBs in Cells 3, 4, 5, and 6 of Unit L-13 until:

I.P(1)(a) The Permittee has submitted to the Regional Administrator by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that Cells 3, 4, 5, and 6 of Unit L-13 have been constructed in compliance with the permit; and

I.P(1)(b) The Regional Administrator has inspected Cells 3, 4, 5, and 6 of Unit L-13 and finds it is in compliance with the conditions of the permit; or

I.P(1)(c) The Regional Administrator has waived, in writing, the inspection or has not within 15 days of the date of receipt of the letter in permit condition I.P(1)(a), notified the Permittee of the intent to inspect.

LQ. Anticipated Noncompliance

I.Q(1) The Permittee shall give at least thirty (30) calendar days advance notice, in writing, to the Regional Administrator of any planned changes in the permitted facility or activity that might result in noncompliance with permit requirements. If thirty (30) calendar days advance notice is not possible, then the Permittee shall give notice within 24 hours of the time it becomes aware of anticipated non-compliance.

LR. Transfer of Permit

I.R(1) The permittee must notify the Agency at least thirty (30) calendar days before transferring ownership of the facility or transferring the right to conduct the PCB landfill operation. The transferor must also submit to the Agency at least thirty (30) calendar days before such a transfer, a notarized affidavit signed by the transferee which states that the transferee will abide by the transferor's Agency PCB landfill approval, and documentation of establishment of financial assurance as required under permit conditions II.N and II.O. Within thirty (30) calendar days of receiving such notification, affidavit, and documentation, the Agency will issue an amended approval substituting the transferee's name for the transferor's name, or the Agency may require the transferee to apply for a new PCB landfill approval. In the latter case, the transferee must abide by transferor's Agency approval until the Agency issues the new approval to the transferee.

I.S. Monitoring Reports

- I.S.(1) The Permittee shall report monitoring results to the Regional Administrator at the intervals required in specific conditions of this permit.

I.T. Compliance Schedules

- I.T.(1) The Permittee shall submit reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule required by specific conditions of this permit to the Regional Administrator no later than fourteen (14) calendar days following each schedule date.

I.U. Twenty-four Hour Reporting

- I.U.(1) The Permittee shall verbally report to the Regional Administrator any noncompliance with the permit that might endanger health or the environment, within 24 hours from the time the Permittee becomes aware of the noncompliance. The report shall include, but not be limited to:
- I.U.(1)(a) Information concerning release of PCBs that might cause an endangerment to public drinking water supplies, and,
- I.U.(1)(b) Any information of a release or discharge of PCBs or of a fire or explosion from the PCB landfill facility, that might threaten the human health or the environment.
- I.U.(2) The description of the occurrence and its cause shall include, but not be limited to:
- I.U.(2)(a) Name, address, and telephone number of the owner or operator;
- I.U.(2)(b) Name, address and telephone number of the facility;

I.U(2)(c) Date, time, and type of incident;

I.U(2)(d) Shipping name, hazard class, nature, and quantity of material(s) involved;

I.U(2)(e) The extent of injuries, if any;

I.U(2)(f) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and,

I.U(2)(g) Estimated quantity and disposition of recovered material that resulted from the incident.

I.U(3) Within five (5) calendar days of the time the Permittee becomes aware of noncompliance that might endanger human health or the environment, the Permittee shall provide a written submission: The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times; the anticipated time noncompliance is expected to continue if the noncompliance has not been corrected; corrective measures being undertaken to mitigate the situation; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

LV. Other Noncompliance

I.V(1) The Permittee shall report to the Regional Administrator all other instances of noncompliance not reported under Conditions I.S., I.T., and I.U. of this permit, at the time monitoring reports are submitted. The reports shall contain the information listed in Condition I.U. of this permit.

I.W. Other Information

- I.W.(1) Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in the permit application or in any report to the Regional Administrator, the Permittee shall promptly submit such facts or corrected information.

I.X. Confidential Information

- I.X.(1) Any information submitted by the Permittee to the Regional Administrator may be claimed as confidential in accordance with the applicable provisions of the Freedom of Information Act, 5 USC 552; EPA regulations issued thereunder, 40 CFR Part 2 and the Toxic Substance Control Act, 15 USC §2613.

II. GENERAL FACILITY CONDITIONS

II.A. Design and Operation of Facility

- II.A.(1) The Permittee shall design, construct, maintain, and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or nonsudden release of PCBs to air, soil, groundwater, or surface water which could threaten human health or the environment.
- II.A.(2) The Permittee shall construct Cells 3, 4, 5, and 6 of Unit L-13 in accordance with the approved designs and specifications that are included in Attachments 11 through 16 of this permit, except for minor changes deemed necessary by the Permittee to facilitate proper construction of the units. Minor deviations from the approved designs or specifications necessary to accommodate proper construction must be noted on the as-built

drawings and the rationale for those deviations must be provided in narrative form. After completion of construction of Cells 3, 4, 5, and 6 of Unit L-13, the Permittee shall submit final as-built drawings and the narrative report to the Regional Administrator as part of the construction certification document specified in permit condition I.P(1)(a).

II.C. General Waste Analysis

II.C(1) The Permittee shall follow the procedures of the Waste Analysis Plan, included as Attachments 2(a) and 2(b) of this permit, except that the following changes to Attachments 2(a) and 2(b) are hereby made:

II.C(1)(a) Attachment 2(a)

II.C(1)(a)(i) Section 2.1, page 2-1, add as last sentence of Introduction:
"All the procedures described in the site's Waste Analysis Plan, not just Sections 2.0 and 5.0, are applicable to PCB wastes to be landfilled which do not fall into the categories of PCB articles or equipment."

II.C(1)(b) Attachment 2(b)

II.C(1)(b)(i) Add as first sentence, on first page of this document the following sentence:
"The terms "hazardous waste", "hazardous waste constituent", or "hazardous constituent" as utilized in this document refers to PCBs."

II.C(1)(b)(ii) Section 5.1, Page 30, add as last sentence of Receiving Procedures:
"In the event that free liquid is found in any incoming PCB waste shipment and such liquid is not included on the generator's shipping document, the Permittee shall document the discrepancy in the operating record and follow the procedures

In the Waste Analysis Plan to resolve the discrepancy. In addition, the Permittee will inspect every incoming container from that generator and that waste stream for the presence of free liquid the subsequent five shipments of that waste stream from that generator. Documentation of inspection of the subsequent five shipments must be maintained in the operating record for the term of this permit."

II.C(1)(b)(iii)

Section 4.0, page 14, add the following language:

"The Permittee shall be fully responsible to ensure that the wastes received at the facility do not violate the provisions of the Land Disposal Restrictions rule as contained in 40 CFR Part 268. To the extent that modifications to the Permittee's Waste Analysis Plan are needed to comply with future self implementing provisions of 40 CFR Part 268, the Permittee must submit a permit modification request to the Regional Administrator within thirty (30) calendar days of the effective date of the self implementing provisions."

II.C(1)(b)(iv) Section 6.2.1, page 39, add the following requirement:

"The Permittee shall utilize the 'Unconfined Compressive Strength of Cohesive Soil' test procedure as outlined in ASTM Method D2166-85 to ensure that the final stabilized mixture achieves an unconfined compressive strength of at least fifty (50) pounds per square inch (psi). This test shall be used as the preacceptance test rather than the 'Stabilization Evaluation Test' proposed by the Permittee. The pocket penetrometer test (Load Bearing Capacity Test), as proposed by the Permittee shall not be required. The Permittee shall use the Paint Filter Liquids Test as the method of demonstrating that no free liquids exist in the stabilized material prior to placement in a landfill unit."

II.C(2)

All references in Attachment 2(a) of this permit to the "site's Waste Analysis Plan", "Arlington Facility's Waste Analysis

Plan", and "facility's Waste Analysis Plan" are references to Attachment 2(b) of this permit.

- II.C(3) The Permittee shall maintain a copy of the approved Waste Analysis Plan, included as Attachments 2(a) and 2(b) of this permit, and any approved modifications to the plan at the facility until facility is fully closed and certified.

II.D. Security Procedures

- II.D(1) The Permittee shall comply with the Security Procedures as contained in Attachment 3 of this permit, except the following changes to Attachment 3 are hereby made as follows:

- II.D(1)(a) Section 3.1.2.5, Security Measures Against Vandalism, page 3-8, second paragraph, first sentence to be superceded by the following sentence:
"Warning signs with the legend Danger--Unauthorized Personnel Keep Out printed in letters at least 1-inch high are posted facing outward on each gate and every 300 feet on the chain link fence".

II.E. Inspection Plan

- II.E(1) The Permittee shall follow the procedures of the approved Inspection Plan, included as Attachments 4(a) and 4(b) of this permit, except the following changes to Attachments 4(a) and 4(b) are hereby made as follows:

- II.E(1)(a) Attachment 4(a)

- II.E(1)(a)(1) Subsection 9.2, page 9-2, second paragraph, first sentence superceded by the following:
"When an inspection indicates equipment malfunctions or deterioration, or any other improper condition, at least the following actions are taken:"

- II.E(1)(a)(ii) Subsection 9.2., page 9-2, second paragraph, under third item listed, replace reference to "General Manager" with reference to "Environmental Coordinator and/or Environmental Manager."

II.E(1)(a)(iii)

Subsection 9.1, page 9-1, third and fourth sentences, replace references to "General Manager" with reference to "Environmental Manager".

II.E(1)(b) Attachment 4(b)

- II.E(1)(b)(i) Add as first sentence, on first page of this document the following sentence:

"The terms "hazardous waste", "hazardous waste constituent", or "hazardous constituent" as utilized in this document refers to PCBs."

- II.E(2) All references in Attachment 4(a) of this permit to "Inspection Plan for the Arlington Facility" "Inspection Plan", "Arlington Facility Inspection Plan", and "facility's Inspection Plan" are references to Attachment 4(b) of this permit.

- II.E(3) The Permittee shall maintain a copy of the Inspection Plan, included as Attachments 4(a) and 4(b) of this permit, at the facility until the facility is fully closed and certified.

- II.E(4) The Permittee may make only the following changes to the Inspection Plan without first obtaining a permit modification:

- II.E(4)(a) Upon certification of closure of an individual PCB landfill unit, any portion of the Inspection Plan specific to the operation of that unit may be deleted from the Inspection Plan (Attachments 4(a) and 4(b) of this permit). The Permittee must notify the Regional Administrator in writing within fifteen (15) calendar days of the date such portions of the Inspection

Plan have been deleted. The Permittee may not otherwise delete inspection requirements from an inspection form without first obtaining a permit modification.

II.E(4)(b) The Permittee may add inspection requirements to an existing inspection form in cases where such additional requirements will result in a more comprehensive or detailed Inspection Plan. The Permittee must submit a copy of such a revised inspection form, accompanied by a narrative explanation, to the Regional Administrator within fifteen (15) calendar days of the date of the revision.

II.E(4)(c) The Permittee may create additional inspection forms to address inspection requirements for equivalent replacement equipment which must be routinely inspected. The Permittee must submit a copy of such a new inspection form, accompanied by a narrative explanation, to the Regional Administrator within fifteen (15) calendar days of the date the form is created or the date when equivalent equipment is placed in operation, whichever occurs first.

II.F. Training Plan

II.F(1) The Permittee shall ensure that all personnel who handle PCB waste are properly trained in PCB waste management, safety, and emergency procedures, as applicable to their job description. These personnel shall be trained in accordance with the Training Plan as included in Attachments 5(a) and 5(b) of this permit, except that the following change to Attachment 5(b) is hereby made:

II.F(1)(a) Attachment 5(b)

II.F(1)(a)(i) Add as first sentence, on first page of this document the following sentence:

"The terms "hazardous waste", "hazardous waste constituent", or "hazardous constituent" as utilized in this document refers to PCBs."

II.F(2) All references in Attachment 5(a) to the "Personnel Training Program" and "Training Plan" are references to Attachment 5(b) of this permit.

II.F(3) The Permittee shall maintain a copy of the Training Plan, included as Attachments 5(a) and 5(b) of this permit, at the facility until the facility is fully closed and certified.

II.G. Hazards Prevention

II.G(1) The Permittee shall follow the procedures outlined in 'Hazards Prevention', included as Attachments 6(a) and 6(b) of this permit which are specific to the handling of PCB wastes to be landfilled prior to, during, and after placement in the landfill, except that the following changes to Attachments 6(a) and 6(b) are hereby made:

II.G(1)(a) Attachment 6(a)

II.G(1)(a)(1) Subsection 3.1.2.3, second and third paragraphs on page 3-5 and the first paragraph on page 3-6 superceded by the following:
"Several steps are taken to assure that PCB contaminated material is not carried from the active disposal area. First, only designated equipment is used in handling PCB wastes. Second, when a vehicle or piece of equipment leaves the PCB cell, operations personnel inspect the vehicle for signs of waste adhering to the vehicle. The sides, tires, and undercarriage of the vehicle are checked. Material that clings to the vehicle is manually removed using shovels and brooms. A record is made and maintained verifying that the vehicle had been inspected and that any material that clinged to the vehicle had been removed."

II.G(1)(a)(ii) Subsection 3.1.2.3, page 3-6, add after second paragraph the following:

"Fourth, transport vehicles and equipment for unloading PCB wastes at landfills are required to stop at the Arlington Facility Truck Washing Unit prior to exiting the facility. After potential waste residues have been spray washed from the vehicle, a site Disposal Technician verifies that the vehicle has been cleaned adequately, records the inspection on the facility's load inspection sheet, and releases the driver. Water from the Arlington Facility Truck Washing Unit must not be reused unless confirmed to contain a PCB concentration of less than 50 parts per million (ppm). All residuals (e.g., liquids, solids, and semisolids) from the Arlington Facility Truck Washing unit must be sampled and analyzed for PCBs after removal from the unit, but prior to disposal or treatment. With the exception that if the residuals are to be treated in the unit, the sampling and analyses for PCBs would be performed prior to removal from the unit and any additional residuals would be precluded from introduction to the unit until the analysis confirmed the PCB concentration was below 50 ppm. If the residuals are found to contain a concentration of PCBs of 50 ppm or greater, the residuals must be handled as a PCB in accordance with 40 CFR §761.60."

II.G(1)(a)(iii)

Subsection 3.1.2.3, page 3-7, last two sentences superceded by the following:

"Sampling and analyses shall be performed in accordance with the procedures designated under the Arlington Facility Waste Analysis Plan. In addition to the random sampling, at least one sample shall be obtained from any area of obvious visual contamination. Samples from such areas shall not be composited with any other samples for analyses. In the event that PCB contamination is detected, the applicable section of the access road or ramp will be scraped until repeat sampling and analysis shows PCB contamination is below 25 ppm. Sampling of the access road or ramp will be repeated at least annually."

II.G(1)(b) Attachment 6(b)

II.G(1)(b)(i) Add as first sentence, on first page of this document the following sentence:

"The terms "hazardous waste", "hazardous waste constituent", or "hazardous constituent" as utilized in this document refers to PCBs."

II.G(2) All references in Attachment 6(a) of this permit to "Arlington Facility's Waste Analysis Plan", are references to Attachment 6(b) of this permit.

II.H. Contingency Plan

II.H(1) The Permittee shall follow the procedures outlined in the Contingency Plan, included as Attachments 7(a), 7(b) and 7(c) of this permit, except that the following change to Attachment 7(b) is hereby made.

II.H(1)(a) Attachment 7b

II.H(1)(a)(i) Add as first sentence, on first page of this document the following sentence:

"The terms "hazardous waste", "hazardous waste constituent", or "hazardous constituent" as utilized in this document refers to PCBs."

II.H(2) References in Attachment 7(a) of this permit to "Contingency Plan" are references to Attachment 7(b) of this permit.

II.H(3) The Permittee shall manage all spills of materials potentially contaminated with PCBs (e.g., transformer flushing solvents, PCB equipment decontamination fluids, etc.) as a spill of PCB above 500 ppm, unless there is Permittee analytical documentation demonstrating otherwise.

II.H(4) The Permittee shall maintain all records required by Attachment 7(c) of the permit at the facility.

II.H(5) If situations arise where following the procedures in Attachments 7(a), 7(b), and 7(c) of this permit would result in different clean-up standards, recordkeeping, or reporting requirements, the Permittee shall follow the procedures in the the Attachment which results in the stricter standards (e.g., lower clean-up level, additional records, quicker reporting).

II.L Recordkeeping and Reporting

II.I(1) The Permittee shall follow the procedures as contained in Attachment 8 of this permit, except the following changes to Attachment 8 are hereby made:

II.I(1)(a) Attachment 8

II.I(1)(a)(i) Subsection 6.2.1, page 6.2.1, second sentence superceded by the following:

"Before any waste PCB load is directed to a storage or disposal area, the following information is recorded: generator, date of receipt, manifest number, transporter, name of waste, storage or disposal method, prospective location, and any other information as required to be collected under Section 2 of Waste Acceptance Procedures."

II.I(1)(a)(ii) Subsection 6.2.1, page 6-1, delete the last sentence.

II.I(1)(a)(iii)

Subsection 6.2.8, page 6-5, Long-term Record Maintenance, first and second sentence superceded by the following:

"All records and documents previously noted, and the annual reports described below must be maintained at the Arlington Facility as long as the Arlington Facility is used for PCB storage and disposal. If the Arlington Facility is no longer

used for PCB storage or disposal then these documents may be maintained at a company facility other than the Arlington Facility as long as the other facility is normally occupied for 8 hours a day and the identity of the other facility is available at the Arlington facility."

II.I(1)(a)(iv) Subsection 6.2.8, page 6-5, third paragraph, first sentence superceded by the following:

"Written records shall be maintained during operation through the end of the post closure period for each PCB landfill unit for the following items:"

II.I(1)(a)(v) Subsection 6.2.8, page 6-5, third paragraph, last two items listed superceded by the following:

- "• Status of PCB receipts (per Section 2).

- Road and Ramp sampling results (per Section 3)."

II.I(1)(a)(vi) Subsection 6.2.8, page 6-5, third paragraph, add to listed items the following:

- "• Laboratory analysis of Unit L-13's primary and secondary leachate collection system liquid.

- Volume and date of liquid removed from unit L-13's primary and secondary leachate collection system liquid.

- Laboratory analysis of Arlington Facility Truck Washing unit residuals.

- Volume and date of residuals removed from Arlington Facility Truck Washing Unit.

- Paint Filter Liquids Test results (per Sections 2.0 and 3.0)

- Stabilization Testing results (per Sections 2.0 and 3.0)
- Records of Future Elevations of the Separator dike in landfill unit L-7 and L-9 (per Section 3.0)"

II.I(1)(a)(vii)

Subsection 6.2.8, page 6-5, third paragraph, add after listed items the following:

"Written records of training shall be maintained during operation through three years into post closure of the CSSI PCB disposal facility. Written records of inspections shall be maintained for three years from the date of the inspection."

II.I(1)(a)(viii)

Subsection 6.3.3, page 6-6, last sentence and remainder of paragraph from bottom of page 6-6, at the top of page 6-7, superceded by the following:

"CSSI must note in its records the time, date, and details of any incident pertaining to PCB's that requires implementation of the Arlington Facility Contingency Plan. Within fifteen (15) days after the incident, CSSI must submit a written report on the incident to the EPA Regional Administrator (Region 10) and DEQ Hazardous Waste Section. The report must include: (1) Name, address, and telephone number of the owner or operator; (2) Name, address, and telephone number of the facility; (3) Date, time, and type of incident (e.g., fire, explosion); (4) Name and quantity of material(s) involved; (5) the extent of injuries, if any; (6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and (7) Estimated quantity and disposition of recovered material that resulted from the incident."

A similar report will be submitted to Oregon DEQ within fifteen (15) calendar days. Prior to resumption of normal operations, a notification shall be provided to DEQ and EPA that clean-up has been completed."

- II.I(2) References in Attachment 8 to "Arlington Facility Contingency Plan" are references to Attachment 7(b) of this permit.
- II.I(3) All records of monitoring information shall include the information designated under permit condition I.N(3).
- II.I(4) The Permittee shall retain all PCB landfill records and make such records available, at reasonable times, for inspection to the Regional Administrator.
- II.I(5) The retention period for all records required by this permit is extended automatically during the course of any unresolved enforcement action regarding the Permittee or as requested by the Regional Administrator.
- II.I(6) The Permittee shall submit copies of records of PCB waste disposal locations and quantities to the Regional Administrator and local land authority within sixty (60) calendar days after certification of closure of each PCB landfill unit at the facility.

II.J. Closure

II.J(1) The Permittee shall close the PCB landfill units in a manner that minimizes the need for further maintenance and controls, minimizes or eliminates to the extent necessary to protect human health and the environment, post-closure escape of PCB's, leachate, contaminated run-off to the ground or surface waters, or to the atmosphere. At a minimum, this requires adherence to the Closure Plan included as Attachments 9, Section 1 of this permit, except that the following changes are hereby made:

II.J(1)(a) Attachment 9, Section 1

II.J(1)(a)(i) Subsection 1.1.1, page 1-1, revise owner's address and telephone number as follows:

"Address: Star Route
Cedar Spring Road
Arlington, OR 97812
Telephone Number: (503) 454-2643"

II.J(1)(a)(ii) Subsection 1.2, page 1-1 first sentence revise "640-acre" to read "1,288-acre".

II.J(1)(a)(iii)

Subsection 1.3, page 1.3 add the following to end of subsection:

- A copy of the approved Closure and Post-Closure Plans, as revised will be maintained at the site until closure is completed.
- CSSI will take all necessary steps to prevent the occurrence of threats to human health and the environment during and after closure of the facility.

- The portions of trucks and earthmoving equipment that come into direct contact with PCB wastes during closure of these landfill units will be decontaminated in accordance with 40 CFR §761.79(b) before use elsewhere on or off the site.

- Soil from the landfill access ramps or roads will be sampled and analyzed as designated under Section 3.1.2.3 Vehicle and Equipment Movement at closure, in accordance with the procedures specified in the Arlington Facility Waste Analysis Plan. In the event that PCB contamination is detected, contaminated soil from the applicable section of the access road or ramp shall be removed to 10 ppm PCBs by weight provided that soil is excavated to a minimum depth of 10 inches. The excavated soil will be replaced with clean soil, i.e., containing less than 1 ppm PCBs, and the excavated area will be vegetated.

- The groundwater monitoring plan established for the operating facility will be maintained during the closure period for all PCB landfill units.

- When closure is completed, CSSI shall submit to EPA certification both by CSSI and an independent professional engineer that closure of the facility has been conducted in accordance with the specifications contained in the Closure Plan.

- The closed facility will be protected by perimeter fencing."

II.J(1)(a)(iv) Subsection 1.4.2 under subheading Closure Procedures, pages (C-1-2)-(C-1-17), superceded by the following:

"Closure commences on placement of the final wastes in each landfill. At commencement of closure the final wastes will be covered in accordance with normal operating practices. Any area of the landfill that previously has not been covered will be covered with native soils to establish grade and to serve as

the base for the final cover. Earthwork associated with closure of the landfills will be substantially completed before the winter months. Closure cover designs for existing (active and inactive) PCB landfills are included in the following documents:

- Final Closure Design, Landfills L-1, 3, 5, 6, Golder Associates, dated May 1987.
- Closure Cover Design, Landfills L-7, 8, 9, 10, and 12, Golder Associates, dated May 1987.
- Closure Cover Design and Construction Drawings for L-13, EMCON Associates, dated May 1987."

II.J(1)(a)(v) Subsection 1.4.2, under subheading Schedule, page C-1-17, superceded by the following:

"Depending on the specific size of each landfill, the starting date for closure, and weather conditions, it is estimated that the time for closure will range from 148 to 807 days.

Placement of final deliveries, on-site wastes, and the addition of native soils to achieve final grade will require 60 to 180 days, depending on the remaining unfilled capacity of the landfill. Construction of the closure cap will require 88 to 627 days, depending on the surface area of the landfill.

Calculations to support the time estimates required for landfill closure are provided in the Closure and Post-Closure Plan for the Arlington Site, Appendix C, page C-4. It is estimated that landfill L-5 will close during 1987; L-7 and L-9 will close during 1988; and L-13 will close in 1991."

II.J(1)(a)(vi) Subsection 1.4.3, page C-1-17, add to end of section the following:

"The equipment no longer to be used for PCB landfill operations and equipment used during the PCB landfill closure period, that has not come in direct contact with PCBs, will be decontaminated

by either high pressure water or steam washing of the tires and undercarriage. Appropriate chemical additives will be added to the cleaning solutions, as specified by the chemical manufacturer. The adequacy of the cleaning solution will be verified through visual inspection, and when the equipment is found to be clean (i.e., no visible evidence of contaminated soil or liquid), cleaning with water or steam will be repeated one more time. Any equipment that has been used for PCB landfill operations and during the PCB landfill closures, that has come in direct contact with PCBs, must be first decontaminated in accordance with 40 CFR §761.79(b). Rinse solutions will be collected in on-site tank trucks and will be transported to and discharged into an on-site surface impoundment after a compatibility determination and a determination that the liquid is less than 50 ppm PCB by weight. Based on compatibility determination, determination that the liquids, semisolids or solids are less than 50 ppm PCB by weight, and adequate stabilization: rinse solutions, semisolids, and solids may also be placed in the landfill."

II.J(1)(a)(vii)

Subsection 1.5.3, page 1-19, add to end of page the following: "The certification will be signed by CSSI and an independent registered professional engineer and will be submitted to the Regional Administrator within sixty (60) calendar days of the completion of final closure. Documentation supporting certification will be provided to the Regional Administrator on request."

II.J(1)(a)(viii)

Subsection 1.5.4, page 1-19, last paragraph second sentence--change reference from "40 CFR 265.117(c) to "40 CFR 264.117(c)".

II.J(1)(a)(ix) Subsection 1.5.4, page 1-19, under second paragraph, change reference in quoted notice from "265.117(c)" to "264.117(c)".

II.J(2) References to "Arlington Facility Waste Analysis Plan" in Attachment 9 of this permit are references to Attachment 2(b) of this permit.

II.J(3) Final cover design for landfill units shall be as specified in Closure Cover Design Details as included in Attachment 10 of this permit. Specifically, the cover design shall be constructed as follows:

II.J(3)(a) Landfill unit L-5 shall be capped in accordance with Attachment 10, Exhibit 20A of this permit. If landfill cell L-5 is certified as closed in accordance with an approved interim status closure plan (40 CFR Part 265) prior to the effective date of this permit, then closure in accordance with this permit (Attachment 9 and Attachment 10, Exhibit 20A) shall not be required.

II.J(3)(b) Landfill units L-7 and L-9 shall be capped in accordance with Attachment 10, Exhibit 20B of this permit.

II.J(3)(c) Landfill unit L-13 shall be capped in accordance with Attachment 10, Exhibit 20C of this permit.

II.J(4) For all landfill units, minor deviations from the permitted closure designs or specifications necessary to accommodate proper closure must be noted on the as-built drawings and the rationale for those deviations in designs, specifications, or procedures must be provided in narrative form with the closure certification statements. Within sixty (60) calendar days after completion of closure of each landfill unit, the Permittee shall submit the final as-built drawings of the closed unit, the narrative report and the certification statements to the Regional Administrator.

II.J(5) The Permittee shall amend the Closure Plan in accordance with the following:

II.J(5)(a) The Permittee may submit a written request to the Regional Administrator for a permit modification to amend the closure plan at any time prior to the notification of closure of a PCB landfill unit.

II.J(5)(b) The Permittee must submit a written request for a permit modification to authorize a change in the approved closure plan whenever:

II.J(5)(b)(i) Changes in operating plans of facility design affect the closure plan, or

II.J(5)(b)(ii) There is a change in the expected year of closure, if applicable, or

II.J(5)(b)(iii)

In conducting partial or final closure activities, unexpected events require a modification of the approved closure plan.

II.J(5)(c) The Permittee must submit a written modification including a copy of the amended closure plan for approval at least sixty (60) calendar days prior to the proposed change in facility design or operation, or no later than sixty (60) calendar days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must request a permit modification no later than thirty (30) calendar days after the unexpected event. The Regional Administrator will approve, disapprove, or modify this amended plan. The approved closure plan will become a condition of the PCB permit issued.

II.J(6) The Permittee shall notify the Regional Administrator at least sixty (60) calendar days prior to the date it expects to begin closure of any PCB Landfill Unit.

II.K. Cost Estimate for Facility Closure

- II.K(1) The Permittee shall develop and maintain a detailed closure cost estimate for each PCB landfill unit, to cover activities designated in Attachment 9, Section 1 and Attachment 10 in accordance with provisions equivalent to those specified in 40 CFR §264.142(a).
- II.K(2) The Permittee shall submit the detailed closure cost estimate developed under permit condition II.K.(1) to the Regional Administrator within thirty (30) calendar days of the effective date of this permit.
- II.K(3) The Permittee shall adjust the closure cost estimate for inflation on an annual basis, in accordance with provisions equivalent to those specified in 40 CFR §264.142(b).
- II.K(4) During the active life of the facility, the Permittee shall submit a revised closure cost estimate to the Regional Administrator within thirty (30) calendar days of approved modification to the closure plan, if such modification results in an increase in the closure cost estimate.
- II.K(5) During the active life of the facility, the Permittee shall keep a copy of each closure cost estimate and adjustments prepared at the facility.
- II.K(6) The Permittee shall maintain an updated summary of current closure costs for the entire facility closure based on the PCB landfill units that have received PCB waste, but have not yet been certified as closed and have not been released from the financial responsibility requirements, as specified in permit condition II.N.

~~II.K(7)~~ Upon closure certification of any PCB landfill unit, the Permittee may adjust the closure cost estimate developed under permit condition II.K(1) to reflect the closure cost of that unit. The Permittee shall submit a current version of the closure cost estimate to the Regional Administrator, along with the closure certification statements for each closed PCB landfill unit.

II.L. Post-closure Care

II.L(1) The Permittee shall comply with the approved Post-closure Plan, included as Attachment 9, Section 2, of this permit, except that the following changes to Attachment 9, Section 2 are hereby made:

II.L(1)(a) Attachment 9, Section 2

II.L(1)(a)(i) Subsection 2.1, page C-2-1, include as first sentence the following:

"A certification of completion of post-closure care will be provided by CSSI to EPA Regional Administrator no later than sixty (60) calendar days after the established post-closure care period for each PCB landfill unit. The certification will be signed by CSSI and an independent registered professional engineer and will certify that all post-closure activities were performed in accordance with the specifications of the approved Post-Closure Plan. Documentation to support the certification will be provided to the Regional Administrator on request."

II.L(1)(a)(ii) Subsection 2.2, page 2-2, the third sentence superceded by the following:

"Throughout the post-closure period the facility will be inspected at the intervals shown on the schedule below:

POST-CLOSURE SCHEDULE OF INSPECTION FREQUENCY

<u>Time After Closure</u>	<u>Activity</u>	<u>Frequency</u>	<u>Total Number of Inspections</u>
0-10 years	Site Inspection	Semiannually	20
	Groundwater	Semiannually	20
10-20 years	Site Inspection	Annually	10
	Groundwater	Semiannually	20

Following the occurrence of a recorded 1-inch, 24-hour storm, as measured at on site weather station, an additional inspection will be scheduled for the covered embankments, roads, dikes, surface runoff containments, and drainageways."

II.L(1)(a)(iii)

Subsection 2.2, page 2.2, the second paragraph superceded by the following:

"Any necessary repairs or maintenance of the landfill covers, leachate detection and removal systems, groundwater monitoring wells, benchmarks, or fencing will be accomplished during the scheduled inspection or shortly thereafter."

II.L(1)(a)(iv) Subsection 2.2, page 2.2, add to end of fourth paragraph the following:

"The drainage control system will be checked for damaged sections, debris and/or excessive vegetation, or other conditions detrimental to the system's operation. The dry climate and slow growth of vegetation will make mowing unnecessary. However, clearing will take place if weeds or grass threaten to interrupt the flow of surface water in the ditches or threaten the integrity of the closure cap. It is estimated that approximately 1,000 feet of ditch will require major maintenance and 20 feet of culvert will need replacement each year during the post-closure period. Ditches will be inspected for high or low spots and erosion.

The design features of the landfill slopes and facility drainage system minimize the potential for deterioration of the estimated 50 acres of closed waste disposal areas. In addition, the sequential completion of burial areas during the life of the facility will result in vegetation being firmly established over a major portion of the site waste repository area prior to closure of the facility.

On-site soil will be used for redressing eroded areas or areas where settlement has occurred that may cause ponding. Other conditions which may necessitate replacement of disturbed soil and/or revegetation include the burrowing activities of rodents or other small animals and the occurrence of a major storm. The soil will be replaced from a borrow area as necessary and vegetated."

- II.L(1)(a)(v) Subsection 2.4, page 2-3, first paragraph superceded by the following:
- "During post-closure the leachate collection and removal systems will be inspected in accordance with the schedule set forth for site inspections under Subsection 2.2 above, and more frequently, as needed. The leachate collection sumps/observation wells will be checked for liquid accumulation by measuring the height of the liquid present. Calibration charts will be developed for all leachate collection sumps/observation wells equating level of liquid measured in inches to volume of liquid in cubic centimeters (cc). If greater than 50 cc of liquid is detected, the liquid shall be sampled and analyzed for the following parameters: PCBs, pH, specific conductance, and total organic halides (TOX) according to the procedures specified in the Arlington Site Waste Analysis Plan. If the liquid is found to have a PCB concentration of 50 ppm or greater, it must be handled as a PCB in accordance with 40 CFR §761.60. A contemporaneous written record will be kept. Based on the results of the analyses, the liquid will be sent to either a sanitary or industrial sewage treatment facility (subject to regulation under either

Section 402 or Section 307(b) of the Clean Water Act), or a RCRA hazardous waste facility, or to a approved PCB disposal facility.

If liquid is found in the leachate collection sumps/observation wells, the liquid shall be removed from the landfill unit, to the extent practicable, within 8 hours of the time such liquid is found."

II.L(1)(a)(vi) Subsection 2.5, page 2-3, add to end of subsection the following:

"If a shifted or damaged monument is discovered during the course of regular post-closure inspection, inspection personnel will notify a survey crew which will reestablish the monument."

II.L(2) The period of post-closure care for each PCB landfill unit shall be twenty (20) years, to commence upon submittal of the closure certification statements for that unit.

II.L(3) The Regional Administrator reserves the right to reopen permit condition II.L(2) and extend the post-closure period for any PCB landfill unit at any time during the life of this permit as deemed necessary to protect human health and the environment.

II.M. Cost Estimate for Post-closure Care

II.M(1) The Permittee shall develop and maintain a detailed post-closure care cost estimate for each PCB landfill unit to cover activities designated in Attachment 9, Section 2 in accordance with provisions equivalent to those specified in 40 CFR §264.144(a).

II.M(2) The Permittee shall submit the detailed post-closure care cost estimate developed under permit condition II.M(1) to the Regional Administrator within thirty (30) calendar days of the effective date of this permit.

II.M(3) The Permittee shall adjust the post-closure cost care estimate for inflation on an annual basis, in accordance with provisions equivalent to those specified in 40 CFR §264.144(b).

II.M(4) During the active life of the facility, the Permittee shall submit a revised post-closure cost care estimate to the Regional Administrator within thirty (30) calendar days of approved modification to the post-closure plan, if such modification results in an increase in the closure cost estimate.

II.N. Financial Assurance for Facility Closure

II.N(1) The Permittee shall establish and provide continuous documentation of financial assurance in at least the amount of the cost estimates required by permit condition II.K(1) in accordance with provisions equivalent to those specified in 40 CFR §264.143 and 40 CFR §264.151.

II.O. Financial Assurance for Facility Post-closure

II.O(1) The Permittee shall establish and provide continuous documentation of financial assurance in at least the amount of the cost estimates required by permit condition II.M(1) in accordance with provisions equivalent to 40 CFR §264.145 or 40 CFR §264.146 and 40 CFR §264.151.

III. LANDFILL DISPOSAL

III.A. Existing Landfill Units L-5, L-7 and L-9

- III.A(1) The PCB portions of units L-5, L-7, and L-9 shall be defined as the existing landfill units at this facility. The PCB portion of Unit L-5 shall be defined as inactive and is not authorized under this permit for further disposal of PCB wastes.
- III.A(2) The Permittee may dispose of the PCB waste streams listed on Table 1 (pages 56 through 57) of this permit, in the existing landfill units, except that the following restrictions on PCB waste disposal shall apply:
- III.A.(2)(a) The Permittee shall not dispose ignitable or reactive wastes (Environmental Protection Agency Waste numbers D001 or D003, respectively) or any listed waste for which the basis for listing under 40 CFR Part 261 is ignitability or reactivity, unless the waste has been treated to render it non-ignitable or non-reactive. For such wastes the Permittee shall follow testing procedures in Attachment 2(b) of this permit.
Note: Cyanide or sulfide bearing waste as defined in 40 CFR §261.23(a)(5) may be packaged in accordance with 40 CFR §264.316 and disposed without first being treated or rendered non-reactive. Ignitable wastes in containers, confirmed to contain no free liquids, managed in accordance with 40 CFR §264.312(a) may be landfilled without first being treated or rendered non-ignitable. Free liquids analyses shall be performed by the Permittee in accordance with the applicable procedures in Attachment 2(b) of this permit.
- III.A(2)(b) The Permittee shall not dispose any PCB waste which are restricted from land disposal under 40 CFR Part 268 unless the applicable treatment standard as specified in 40 CFR Part 268 has been achieved. In addition, as new PCB wastes are specified for land disposal restriction under 40 CFR Part 268,

the Permittee shall immediately cease disposing of such wastes upon the effective date of the 40 CFR Part 268 regulation, unless the treatment standard as specified in 40 CFR Part 268 has been achieved.

III.A(2)(c) Prior to landfilling PCB Waste Stream (1) listed on Table 1 (page 56) of this permit the following must be performed:

III.A(2)(c)(i) Free liquid analyses shall be performed by the Permittee in accordance with the applicable procedures in Attachment 2(b) of this permit.

III.A(2)(c)(ii)

Testing or other confirmation to ensure that the waste originally contained less than a PCB concentration of 500 ppm by weight. Such testing or other confirmation shall be done by the Permittee, generator, or other off-site treatment facility prior to treatment of the waste, using, as appropriate, sampling and analytical methods outlined in Attachments 2(a) and 2(b) of this permit.

III.A(2)(d) Prior to landfilling PCB Waste Stream (2) listed on Table 1 (page 56) the following must be performed:

III.A(2)(d)(i) Free liquid analyses shall be performed by the Permittee in accordance with the applicable procedures in Attachment 2(b) of this permit.

III.A(2)(d)(ii) Testing or other confirmation to ensure that the waste originally contained less than a PCB concentration of 500 ppm. Such testing or other confirmation shall be done by the Permittee, generator, or other off-site treatment facility prior to treatment of the waste, using, as appropriate, sampling and analytical methods outlined in Attachments 2(a) and 2(b) of this permit.

III.A(2)(d)(iii)

Testing to ensure that the waste has been properly stabilized. Such testing shall be done using sampling and analytical methods outlined in permit condition II.C, Attachment 2(b) of this permit.

III.A(2)(e) Prior to landfilling PCB waste streams 3, 4, 5, 6, and 7 listed on Table 1 (page 56) of this permit the following shall be performed:

III.A(2)(e)(i) Free liquid analyses shall be performed by the Permittee in accordance with the applicable procedures in Attachment 2(b) of this permit.

III.A(2)(f) Prior to landfilling PCB waste streams 8(a), 8(c), 8(d) and 9 listed on Table 1 (page 57) of this permit the Permittee shall verify that these waste streams have been drained.

III.A(3) The Permittee shall maintain documentation of the testing and verification performed under permit condition III.A(2) in the operating records at the facility during the operation through the end of the post closure period of the landfill unit designated for the PCB waste stream's disposal. This documentation of the testing shall at a minimum include the information designated under permit condition I.N(3). For the testing performed under permit condition III.A(2)(d)(iii) this documentation must also contain a description of the stabilization procedures used and the test results indicating that at least 50 psi unconfined compressive strength of the stabilized waste was achieved. The documentation must indicate that the test method used was the 'Unconfined Compressive Strength of Cohesive Soil' (ASTM Method D2166-85) and must contain a signed certification that the above conditions have been met.

III.A.(4) The Permittee shall maintain the design of units L-5, L-7 and L-9 as specified in Attachment 15(a) of this permit (Landfills -- Design and Operation), and Attachment 16(a) of

this permit (Existing Landfill Drawings) except that the following changes to Attachment 15(a) of this permit are hereby made:

III.A.(4)(a) Attachment 15(a)

III.A.(4)(a)(1)

Subsection 3.2.4, add to the end of this subsection the following:

"Future elevations of the separator dike in L-7 and L-9 will be constructed as shown in the drawings in Appendix B-1, using fine grained clayey soil admixed with bentonite (5 percent), placed in 10" lifts, and compacted to a minimum of 90% standard proctor to achieve a maximum permeability of 1×10^{-7} centimeters per second, following the procedures and maintaining the records designated under Exhibit 7B of the RCRA permit application."

III.A.(5) The Permittee shall operate units L-5, L-7, and L-9 in accordance with the operating practices described in Attachment 15(a) of this permit and in accordance with permit condition III.A(1), except that the following changes to Attachment 15(a) are hereby made:

III.A(5)(a) Attachment 15(a)

III.A(5)(a)(1)

Subsection D.7.7 of Attachment 15(b), renumbered 4.2. supercedes Subsection 4.2 of 15(a),

III.A(5)(a)(ii)

Subsection 4.4, page 4-2(a), first sentence superceded by the following:

"Waste sampling and analysis is performed in accordance with Section 2, Waste Acceptance Procedures and the CSSI Waste Analysis Plan."

III.A(5)(i)(ii)

At the end of Section 4.0 of 15(a) add Subsections D.7.5 and D.7.6 of Attachment 15(b), renumbered 4.5 and 4.6, respectively.

III.A(5)(a)(iv)

Subsection 5.2.1, page 5-7, last paragraph superceded by the following:

"The quantity of any liquids present in the leachate collection sumps/observation wells of units L-5, L-7, and L-9 shall be determined by measuring the height of the liquid present and using a calibration chart, equating level of liquid measured in inches to volume of liquid in cubic centimeters. If greater than 50 cc of liquid is detected, the liquid shall be sampled and analyzed for the following parameters: PCBs, pH, specific conductance, and total organic halides (TOX) according to the procedures specified in the Arlington Site Waste Analysis Plan. If the liquid is found to have a PCB concentration of 50 ppm or greater, it must be handled as a PCB in accordance with 40 CFR §761.60. A contemporaneous written record shall be kept. Based on the results of analyses, the liquid will be sent to either a sanitary industrial sewage treatment facility (subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act), or a RCRA hazardous waste facility, or to a approved PCB disposal facility.

If liquid is found in the leachate collection sumps/observations wells, the liquid shall be removed from the landfill unit, to the extent practicable, within 8 hours of the time such liquid is found."

III.A(5)(a)(v)

Subsection 5.2.1, page 5-7, first paragraph, second sentence superceded by the following:

"The results of the monthly inspections, including the amount of any liquid found, are recorded on inspection report forms."

Additionally, the Permittee shall comply with all provisions of permit condition III.A. and all applicable sections of Attachments 2(a) and 2(b), Attachments 4(a) and 4(b), and Attachments 7(a), 7(b), and 7(c) of this permit.

- III.A(6) All references in Attachment 15(a) of this permit to "Arlington Facility's Waste Analysis Plan", and "CSSI Waste Analysis Plan" are references to Attachment 2(b) of this permit.
- III.A(7) All references in Attachment 15(a) of this permit to "Exhibit 7B of the RCRA permit application" are references to Attachment 12 of this permit.
- III.A(8) The Permittee shall close each of the existing landfill units in accordance with the applicable sections of Attachment 9 of this permit, Attachment 10 of this permit, and permit condition II.J.
- III.A(9) The Permittee shall follow the requirements for post-closure care of the existing landfill units in accordance with the applicable sections of Attachment 9 and permit condition II.L. The post-closure care period for each unit shall begin at the time of receipt of the closure certification statements by the Agency, except as provided by permit condition V.G(2).

III.B. New and Proposed Landfill Units L-13

- III.B(1) Cells 1 and 2 of unit L-13 (placed in service prior to issuance of this permit) shall be defined as the new PCB landfill units. Cells 3, 4, 5, and 6 of unit L-13 (to be placed in service after issuance of this permit) shall be defined as the proposed PCB landfill units at this facility.
- III.B(2) The Permittee may dispose of the PCB waste streams listed on Table 1 (pages 56 through 57) of this permit in unit L-13. The disposal of these PCB wastes in unit L-13 is subject to the following restrictions:

III.B(2)(a) The Permittee shall not dispose ignitable or reactive wastes (Environmental Protection Agency Waste numbers D001 or D003, respectively) or any listed waste for which the basis for listing under 40 CFR Part 261 is ignitability or reactivity, unless the waste has been treated to render it non-ignitable or non-reactive. For such wastes, the Permittee shall follow testing procedures in Attachment 2(b) of this permit. Note: Cyanide or sulfide bearing waste as defined in 40 CFR §261.23(a)(5) may be packaged in accordance with 40 CFR §264.316 and disposed without first being treated or rendered non-reactive. Ignitable wastes in containers, confirmed to contain no free liquids, managed in accordance with 40 CFR §264.312(a) may be landfilled without first being treated or rendered non-ignitable. Free liquids analyses shall be performed by the Permittee in accordance with the applicable procedures in Attachment 2(b) of this permit without first being treated or rendered non-reactive.

III.B(2)(b) The Permittee shall not dispose any PCB wastes which are restricted from land disposal under 40 CFR Part 268 unless the applicable treatment standard as specified in 40 CFR Part 268 has been achieved. In addition, as new PCB wastes are specified for land disposal restriction under 40 CFR Part 268, the Permittee shall immediately cease disposing of such wastes upon the effective date of the 40 CFR Part 268 regulation, unless the treatment standard as specified in 40 CFR Part 268 has been achieved.

III.B(2)(c) Prior to landfilling PCB Waste Stream (1) listed on Table 1 (page 56) of this permit the following must be performed:

III.B(2)(c)(1) Free liquid analyses shall be performed by the Permittee in accordance with the applicable procedures in Attachment 2(b) of this permit.

III.B(2)(c)(i)

Testing or other confirmation to ensure that the waste originally contained less than a PCB concentration of 500 ppm by weight. Such testing or other confirmation shall be done by the Permittee, generator, or other off-site treatment facility prior to treatment of the waste, using, as appropriate, sampling and analytical methods outlined in Attachments 2(a) and 2(b) of this permit.

III.B(2)(d) Prior to landfilling PCB Waste Stream (2) listed on Table 1 of this permit (page 56), the following must be performed:

III.B(2)(d)(i) Free liquid analyses shall be performed by the Permittee in accordance with the applicable procedures in Attachment 2(b) of this permit.

III.B(2)(d)(ii)

Testing or other confirmation to ensure that the waste originally contained less than a PCB concentration of 500 ppm. Such testing or other confirmation shall be done by the Permittee, generator, or other off-site treatment facility prior to treatment of the waste, using, as appropriate, sampling and analytical methods outlined in Attachments 2(a) and 2(b) of this permit.

III.B(2)(d)(iii)

Testing to ensure that the waste has been properly stabilized. Such testing shall be done using sampling and analytical methods outlined in permit condition II.C., Attachment 2(b) of this permit.

III.B(2)(e) Prior to landfilling PCB waste streams 3, 4, 5, 6, and 7 listed on Table 1 (page 56) of this permit, the following shall be performed:

III.B(2)(e)(i) Free liquid analyses shall be performed by the Permittee in accordance with the applicable procedures in Attachment 2(b) of this permit.

III.B(2)(c) Prior to landfilling PCB waste streams 8(a), 8(c), 8(d) and 9 listed on Table 1 (page 57) of this permit the Permittee shall verify that these waste streams have been drained.

III.B(3) The Permittee shall maintain documentation of the testing and verification performed under permit condition III.B(2) in the operating records at the facility during the operation through the end of the post closure period of the landfill unit designated for the PCB waste stream's disposal. This documentation of testing shall at a minimum include the information designated under permit condition I.N(3). For the testing performed under permit condition III.B(2)(d)(iii) this documentation must also contain a description of the stabilization procedures used and the test results indicating that at least 50 psi unconfined compressive strength of the stabilized waste was achieved. The documentation must indicate that the test method used was the 'Unconfined Compressive Strength of Cohesive Soil' (ASTM Method D2166-85) and must contain a signed certification that the above conditions have been met.

III.B(4) The Permittee shall maintain the design of cells 1 and 2 in unit L-13 as specified in Attachment 15(b) of this permit (Landfills -- Design and Operation), and Attachment 16(b) of this permit.

III.B(5) The Permittee shall retrofit and construct proposed cells 3, 4, 5, and 6 of unit L-13 in accordance with the applicable design specifications of Attachment 15(b) and Attachment 16(b) of this permit. In addition, the Permittee shall follow the applicable specifications of Attachment 11, Attachment 12, and Attachment 13 of this permit.

III.B(6) Prior to construction of any soil liner for any landfill, a test fill shall be required. The Permittee shall construct and test the test fill in accordance with the procedures contained in the Agency's publication, Construction Quality Assurance

Guidance (EPA 5320-SW-86-031, OSHER Policy Directive
No. 9472.003).

III.B(7) The Permittee shall operate unit L-13 in accordance with the operating practices described in Attachment 15(b) of this permit, and in accordance with permit condition III.B, except that the following changes to Attachment 15(b) are hereby made:

III.B(7)(a) Add as first sentence, on first page of this document the following sentence:
"The terms "hazardous waste", "hazardous waste constituent", or "hazardous constituent" as utilized in this document refers to PCBs."

III.B(7)(b) Add to the end of Attachment 15(b), Subsections 4.3 (including Figure 4.3) and 4.4 from Attachment 15(a), renumbered as Subsections D.7.8 and D.7.9 respectively.

Additionally, the Permittee shall comply with all provisions of permit condition III.B. and all applicable sections of Attachments 2(a) and 2(b), Attachments 4(a) and 4(b), and Attachments 7(a), 7(b), and 7(c) of this permit.

III.B(8) If liquid is found in the leachate collection system of unit L-13 after PCB waste has been placed in that unit (or in individual cells within that unit), the liquid shall be removed from the landfill unit, to the extent practicable, within eight (8) hours of the time such liquid is found. If greater than 50 cc of liquid is detected, it will be sampled and analyzed for the following parameters: PCBs, pH, specific conductance, and total organic halides (TOX) according to the procedures specified in Attachments 2(a) and 2(b) of this permit. If the liquid is found to have a PCB concentration of 50 ppm or greater, it must be handled as a PCB in accordance with 40 CFR §761.60. Based on the results of the analyses the liquid will be sent to either a sanitary or industrial sewage treatment facility (subject to regulation under either

Section 402 or Section 307(b) of the Clean Water Act, or a RCRA hazardous waste facility, or to a approved PCB disposal facility.

III.B(9) The Permittee shall follow the procedures as specified in Attachment 14 of this permit, for cells 1 and 2 of unit L-13, with the following changes:

III.B(9)(a) "The Permittee shall monitor for and record on a daily basis the presence and volume of liquids in the secondary leachate collection system sumps during the active life of the unit (including the closure period), and at least weekly during the post-closure period. The quantity of any liquids present shall be determined by measuring the height of the liquid present and using a calibration chart equating level of liquid measured in inches to volume of liquid in cubic centimeters."

III.B(9)(b) "The Permittee shall analyze the daily monitoring data during the active life on a weekly basis and the weekly monitoring data during the post-closure period on a quarterly basis to determine if the action leakage rate (ALR) is exceeded."

III.B(9)(c) "The Permittee shall, within forty-five (45) calendar days of detecting an increase of greater than 50 percent above the preceding weekly average leakage rate, submit to the Regional Administrator a report on the leakage that includes the following information:

III.B(9)(c)(1)

An assessment of the problem causing the leak that includes a profile of liquid quantity collected and removed, versus time and characterization of changes in the rate of top liner leakage;

III.B(9)(c)(ii):

A description of any change in the response to be implemented which differs from the procedures of the response action plan;

III.B(9)(c)(iii)

A schedule for implementation; and,

III.B(9)(c)(iv)

Other information to fully describe the response that will be implemented."

III.B(9)(d)

"In the event that leakage is found to exceed the action leakage rate (ALR), the Permittee shall notify the Regional Administrator, in writing, within seven (7) calendar days of the date the ALR was exceeded and shall specify its proposed course of action."

III.B(10)

Prior to placement of PCB waste into Cells 3, 4, 5, or 6 of unit L-13, the Permittee shall obtain a permit modification from the Agency which specifies approved procedures that will be used to address liquid that may be found in the secondary leachate collection system sumps of each unit. The Permittee shall include a modified Response Action Plan with the modification request.

III.B(11)

The Permittee shall close unit L-13 in accordance with the applicable sections of Attachment 9, Attachment 10, and permit condition II.J.

III.B(12)

The Permittee shall follow the requirements for post-closure care of unit L-13 in accordance with the applicable sections of Attachment 9 of this permit and permit condition II.L. The post-closure care period for L-13 shall begin at the time of receipt of the closure certification statements by the Agency.

TABLE 1

PCB WASTE STREAMS FOR DISPOSAL IN UNITS L-7, L-9, and L-13

1. Waste stream originating as a liquid containing a PCB concentration of 50 ppm by weight, or greater, but less than 500 ppm which has been treated and contain no free liquids* and containerized prior to placement in the landfill.^(a)
2. Waste stream originating as a liquid containing a PCB concentration of 50 ppm by weight, or greater, but less than 500 ppm which has been treated and contain no free liquids* and to be adequately stabilized.^(a)
3. PCB contaminated absorbent materials from spill cleanup that contain no free liquids*.
4. PCB contaminated soil that contain no free liquids*.
5. PCB contaminated rags that contain no free liquids*.
6. PCB contaminated construction, demolition and grubbing debris that contain no free liquids*.
7. Dredged materials from water courses that contain no free liquids*.

(a) Includes PCB industrial sludges or slurries (i.e., process wastes, tank sludges, lagoon sludges, and similar materials).

* Free liquids analyses shall be performed by the Permittee in accordance with the applicable procedures in Attachment 2(b) of this permit.

TABLE 1 (Cont.)

PCB WASTE STREAMS FOR DISPOSAL IN UNITS L-7, L-9, and L-13

8. PCB articles:

- a. PCB transformers drained and flushed as designated in 40 CFR §761.60(b)(1)(i)(B).
- b. PCB capacitors containing PCBs at a concentration of 50 ppm or greater, but less than 500 ppm.
- c. Other PCB articles within a PCB concentration of 500 ppm or greater drained as designated in 40 CFR §761.60(b)(5)(i)(B).
- d. Other drained PCB articles which under 40 CFR §761.60(b) may be disposed as municipal solid waste.

9. PCB containers drained as designated in 40 CFR §761.60(c).

IV. SURFACE WATER MANAGEMENT PLAN

IV.A. Design, Operation, and Maintenance of Surface Water Management System

- IV.A(1) The Permittee shall construct the surface water management system in accordance with the design, description, and specifications in Attachment 17 of this permit.
- IV.A(2) The Permittee shall operate and maintain the surface water management system in the manner specified in Attachment 17 of this permit and in accordance with permit condition II.A(1).
- IV.A(3) The Permittee shall be allowed to implement changes to the surface water management plan in the event of emergency conditions without obtaining a permit modification from the Agency. Any emergency changes to the surface water management system must be documented and reported to the Regional Administrator, in writing, within thirty (30) calendar days of such changes. If the Regional Administrator determines that such changes constitute a significant deviation from the permit (Attachment 17), the Regional Administrator shall notify the Permittee that a permit modification will be required. The Permittee shall submit any required permit modification request within thirty (30) calendar days of such notification.

IV.B. Schedule of Compliance.

The portion of the facility surface water management system that impacts active PCB waste landfill units or closed PCB landfill units must be installed and operational within 180 calendar days of the effective date of this permit. The portion of the facility surface water management system that is designed to serve proposed PCB landfill units must be installed and operational prior to placement of waste into those units. The Permittee shall follow the provisions of permit condition I.P. for new system construction.

V. GROUNDWATER MONITORING PROGRAM

V.A. Monitoring Well Locations

Permit conditions V.A(1) through V.A(2) shall supercede "Groundwater Monitoring Program", included as Attachment 18, Section 4.1 of this permit. Additionally, Plates 1 and 2 of this permit supercede Plates 1 and 2 of Attachment 18, Section 4.1; and Table 2 of this permit supercedes Attachment 18, Section 4.1, Table 4-1.

- V.A(1) The Permittee shall maintain ten (10) existing downgradient groundwater monitoring wells and three (3) existing background water quality monitoring wells as designated on Plates 1 and 2 (pages 68 and 69 of this permit) and as listed on Table 2 (page 70) of this permit.
- V.A(2) The Permittee shall install ten (10) new groundwater monitoring wells, at the locations specified on Plates 1 and 2 of this permit and as listed on Table 2 of this permit. Each new well shall be located within thirty (30) feet of the horizontal grid coordinate specified on Table 1 of this permit.

V.B. Monitoring Well Construction

Permit conditions V.B(1) through V.B(7) shall supercede Attachment 18, Section 4.1.2.

- V.B(1) All new monitoring wells (and any replacement wells) shall be drilled to a minimum diameter of eight (8) inches, by either air rotary or cable tool methods.
- V.B(1)(a) Inspection of drilling and well construction shall be performed by a qualified geologist. The geologist shall construct and maintain a detailed log of each well, describing the geologic strata and moisture levels encountered during drilling. The

Permittee shall submit to the Regional Administrator these logs and descriptions with the as-built drawings for each well within sixty (60) calendar days after completion of each well.

- V.B(1)(b) The Permittee shall take all reasonable precautions during drilling which may be necessary to prevent potential cross contamination between different zones.
- V.B(2) Well depths, screened intervals, and filter intervals shown on Table 1 should be considered approximate and shall be adjusted by the Permittee at the time of well construction to accommodate screening of the designated aquifer unit (Selah Level 1 or 2) while maintaining hydraulic separation between aquifer units. Hydraulic separation shall be maintained through proper placement of well screens, sand filter intervals, and well annulus seals to avoid screening of wells through the persistent gray clay confining unit (or other significant confining unit) which separates the Selah Level 1 and Level 2 aquifers where the clay is present.
- V.B(3) The first well in each well pair (i.e., Level 2) shall be drilled to approximately 5 feet above the estimated surface of the Priest Rapids Basalt and then logged geophysically to identify the saturated zone and confining intervals within the Selah aquifer. The geophysical logging suite shall include, at a minimum, neutron, gamma-gamma, and natural gamma logging. The well shall be completed to fully screen the Selah Level 2 aquifer up to the base of the gray clay confining layer (or other significant confining unit that may be present at that location), and shall include a silica sand filter and bentonite seal, appropriately placed by tremie pipe so as to isolate the screened zone beneath the confining layer. The remainder of the well annulus, up to the ground surface, shall be sealed with bentonite slurry, placed by a tremie pipe. A lockable security casing shall be grouted in place over the well head, with the grout cap sloping away from the well head to prevent ponding of water.

V.B(4) Following completion of each Level 2 well, the Level 1 well of that well pair shall be drilled in the same manner as the Level 2 well, except that the Level 1 well shall be completed to the top of the gray clay layer (or other confining layer that may be present at that location). The screened interval shall extend from the top of the confining clay layer to approximately 3 feet above the top of the saturated Selah aquifer. A silica sand filter shall be placed by tremie pipe in the well annulus from the bottom of the well screen to a height of two to three feet above the top of the well screen. A 3 foot bentonite seal shall be placed by tremie pipe in the well annulus immediately above the sand filter, extending up to the ground surface. A lockable security casing shall be grouted in place over the well head, with the grout cap sloping away from the well head to prevent ponding of water.

V.B(5) Where no significant confining layer separating the Selah Level 1 and 2 aquifers is identifiable, the Level 1/Level 2 well pair shall be drilled, screened, and sealed so as to screen the full saturated thickness of the Selah aquifer at that location. At locations where the full saturated thickness is found to be less than twenty (20) feet, based on drilling and geophysical logging, a single fully penetrating well shall be acceptable to monitor both Levels 1 and 2 at that location, provided the top of the screen extends approximately 3 feet above the water table.

V.B(6) All new or replacement monitoring well casings and screens shall be constructed of either Type 316 stainless steel or Schedule 80 polyvinyl chloride (threaded connection and approved by National Sanitation Foundation) within either the unsaturated or saturated zone of the Selah aquifer. The well screen slot size and construction shall be selected in consideration of the grain size of the native material around the screen and the appropriate silica sand filter gradation, to minimize turbidity in the water samples and to minimize the potential of silting in the well.

V.B(7) The Permittee shall construct, develop, and equip all new monitoring wells, (10 wells total), as required by permit conditions V.A. through V.A(2), and V.B. through V.B(7) within 270 calendar days after the effective date of this permit. If a monitoring well must be replaced for any reason during the term of this permit, it shall be replaced within thirty (30) calendar days of the date taken out of service.

V.C. Monitoring Well Maintenance

- V.C(1)** The Permittee shall maintain all monitoring wells in good working order, making necessary repairs in a timely manner so that the sampling program is not hindered or delayed in any way. The Permittee shall maintain an adequate supply of replacement parts and repair equipment to ensure that each sampling event proceeds on schedule.
- V.C(2)** The Permittee shall follow the procedures in the Inspection Plan, Table 3-2 and Figure A-3, which are included in Attachment 4(b) of this permit for routine inspection of monitoring wells. Note: Figure A-3 must be revised to reflect the additional monitoring wells that are required by permit conditions V.A(1) and V.A(2).
- V.C(3)** The Permittee shall maintain borehole integrity of each monitoring well. The Permittee shall sound each well on a routine basis every other year, beginning with the first annual sampling event after the completion of construction of all new monitoring wells which are specified in permit condition V.A(2). The Permittee shall maintain records of the depth of well measurements and the silt/sediment accumulation in the operating record for the term of this permit.
- V.C(4)** The Permittee shall redevelop any monitoring well when either of the following two conditions occur:

V.C(4)(a) Silt or sediment is determined to have entered the well and has accumulated to a depth of one foot or more; or,

V.C(4)(b) Yield from the well is noted to have significantly decreased or recovery time has significantly increased, indicating clogging of the screen and/or sand filter.

V.D. Detection Monitoring Program

The Permittee shall comply with Attachment 18, Section 6 of this permit, as modified by the following permit conditions.

V.D(1) The Permittee shall include all monitoring wells as required by permit conditions V.A(1) and V.A(2) in the detection monitoring program.

V.D(2) The Permittee shall obtain water level (or piezometric head) measurements from all monitoring wells, for which water level elevations (or piezometric heads) have stabilized after construction, prior to each sampling event. Measurements for each monitoring well shall be obtained prior to purging of the well. The Permittee shall use this data to determine the rate and direction of groundwater flow annually. The Permittee shall use these data, adjusted for barometric efficiency at each well, to construct water table elevation (or piezometric surface) contour maps for Level 1 and Level 2 of the Selah Aquifer. These maps shall be submitted to the Regional Administrator by September 1 of each year. Additionally, the Permittee shall submit, with the contour maps, a written review of the adequacy of the groundwater monitoring system relative to observed groundwater flow directions.

V.D(3) The Permittee shall begin sampling of each new groundwater monitoring well at the next annual sampling event following completion of construction of that well, irrespective of the construction status of other new monitoring wells.

V.D(4) The Permittee shall continue the Detection Monitoring Program at each monitoring well until:

V.D(4)(a) The Regional Administrator notifies the Permittee, in writing, that the post-closure care period for a PCB landfill unit has been completed, with no indication of contamination in that monitoring well; or,

V.D(4)(b) The Regional Administrator directs the Permittee to enter a compliance monitoring program in accordance with provisions equivalent to 40 CFR §264.99 or a corrective action program in accordance with provisions equivalent to 40 CFR §264.100, for a specific monitoring well or group of wells.

V.D(5) The Permittee shall close all wells that are taken out of service for any reason, in accordance with the requirements of the State of Oregon Water Resources Department.

V.D(6) The Permittee shall sample and analyze all monitoring wells during each annual sampling event for the parameters listed in permit condition V.E(3). Results of the analyses shall be submitted to the Regional Administrator within thirty (30) calendar days the Permittee's receipt of results from the laboratory, but in no case shall the period between the date of sampling and the date of submission of analytical results to the Regional Administrator exceed ninety (90) calendar days.

V.E. Groundwater Sampling and Analysis

The Permittee shall comply with Attachment 18, Sections 5 and 6 of this permit, as modified by the following permit conditions.

V.E(1) The specifications of the positive displacement pump mentioned in Attachment 18, Section 5.1 shall be equivalent to a "Hydrostar Model HS-8000" pump.

V.E(2) Water used in comprising field blanks shall be distilled/deionized, organic free water and shall be from the same source as that water used to decontaminate sampling equipment and filtering apparatus. Trip blanks may be supplied by the laboratory which conducts the groundwater analyses.

V.E(3) The groundwater sampling parameters specified on Table 6-1 will be superseded by the following parameters:

- PCBs
- Total Organic Halides
- pH
- Specific conductivity
- Temperature
- Depth to water

V.E(4) The following analytical methods referenced from the Third Edition of EPA SW-846 ("Test Methods for Evaluating Solid Waste, Physical/Chemical Methods") shall be used in analysis of groundwater samples, in lieu of those referenced by the Permittee in Attachment 18, Section 5.4:

- PCBs: Method 8080;
- Total Organic Halides, Method 9020
- pH: Method 9040; and,
- Specific conductance: Method 9050

In addition, analytical methods for any other parameters that are required by this permit, shall be as specified in EPA SW-846, Third Edition.

V.E.(5) The Permittee shall follow the procedures described in Attachment 18, Appendix C ["Manual for Groundwater Sampling (Waste Management, Inc.)"] of this permit.

V.F. Data Evaluation

The Permittee shall comply with Attachment 18, Section 7 of this permit, except that permit conditions V.F(1) through V.F(5) shall supercede Attachment 18, Section 7.3.

- V.F(1) The statistical monitoring criteria for evaluating data from each sampling event for each PCB compound shall be set at 10 parts per billion (ppb) using the method designated in permit condition V.E(4) of this permit.
- V.F(2) Within ninety (90) calendar days of detection of PCBs' concentrations in downgradient monitoring well(s) that exceeds the concentration level specified in permit condition V.F(1) the Permittee shall submit to the Regional Administrator either of the following:
- V.F(2)(a) An application for a permit modification, in accordance with provisions equivalent to 40 CFR §264.98(h)(4), to establish a compliance monitoring program meeting provisions equivalent to 40 CFR §264.99; or,
- V.F(2)(b) A report demonstrating that a source other than a PCB landfill unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation, and in addition, an application for a permit modification to make any appropriate changes to the detection monitoring program at the facility.
- V.F(4) For all parameters, other than PCBs, the Permittee shall perform graphical time trend analyses for these parameters. Analytical data collected for these parameters over the first three (3) annual sampling events following the effective date of this permit shall be used to construct these analyses. These analyses shall be submitted to the Regional Administrator with the analytical data from the third annual

sampling event following the effective date of this permit. In addition, the Permittee shall submit analytical results for these parameters for every sampling event, in accordance with the time limits specified in permit condition V.D(3). Based on the analytical data for these parameters, the Regional Administrator shall determine whether a significant increase above background concentrations has occurred and will notify the Permittee, in writing, of any action that may be required of the Permittee.

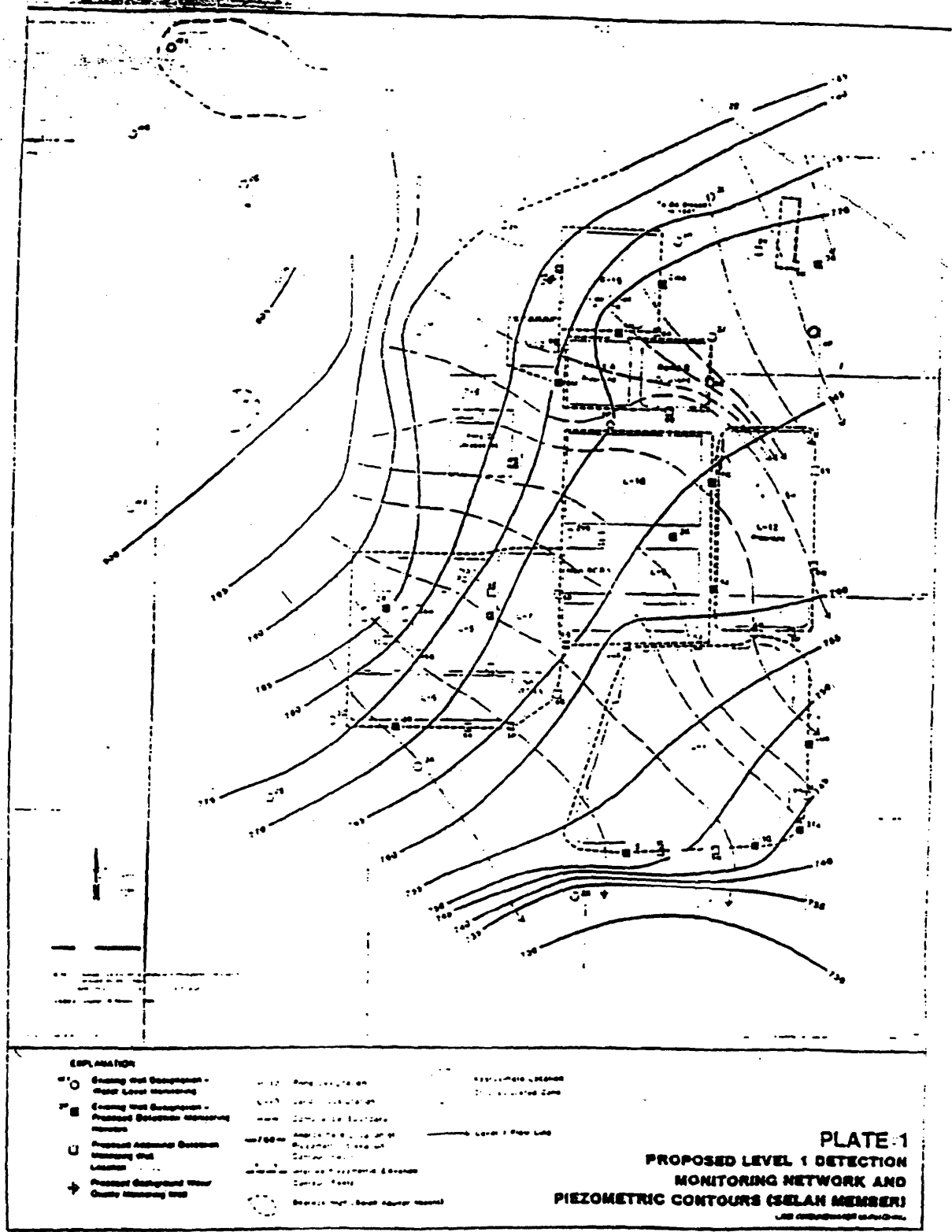
- V.F(5) Within ninety (90) calendar days of a written request by the Regional Administrator, the Permittee shall submit a permit modification request to modify the detection monitoring program, to implement a compliance monitoring program in accordance with provisions equivalent to 40 CFR §264.99, or to implement a corrective action program in accordance with provisions equivalent to 40 CFR §264.100, whichever is determined to be appropriate by the Regional Administrator, based on analytical results from the detection monitoring program.

V.G. Post-closure Monitoring

- V.G(1) All procedures described in permit condition V for inspection, maintenance, and monitoring of the groundwater monitoring system shall apply to the post-closure care period, as well as the active life of each PCB landfill unit.
- V.G(2) As specified in permit condition II.L(3), the Regional Administrator reserves the right to extend the post-closure period for any PCB landfill unit beyond twenty (20) years, if sufficient cause for extension exists. Such an extension would be done as a permit modification.

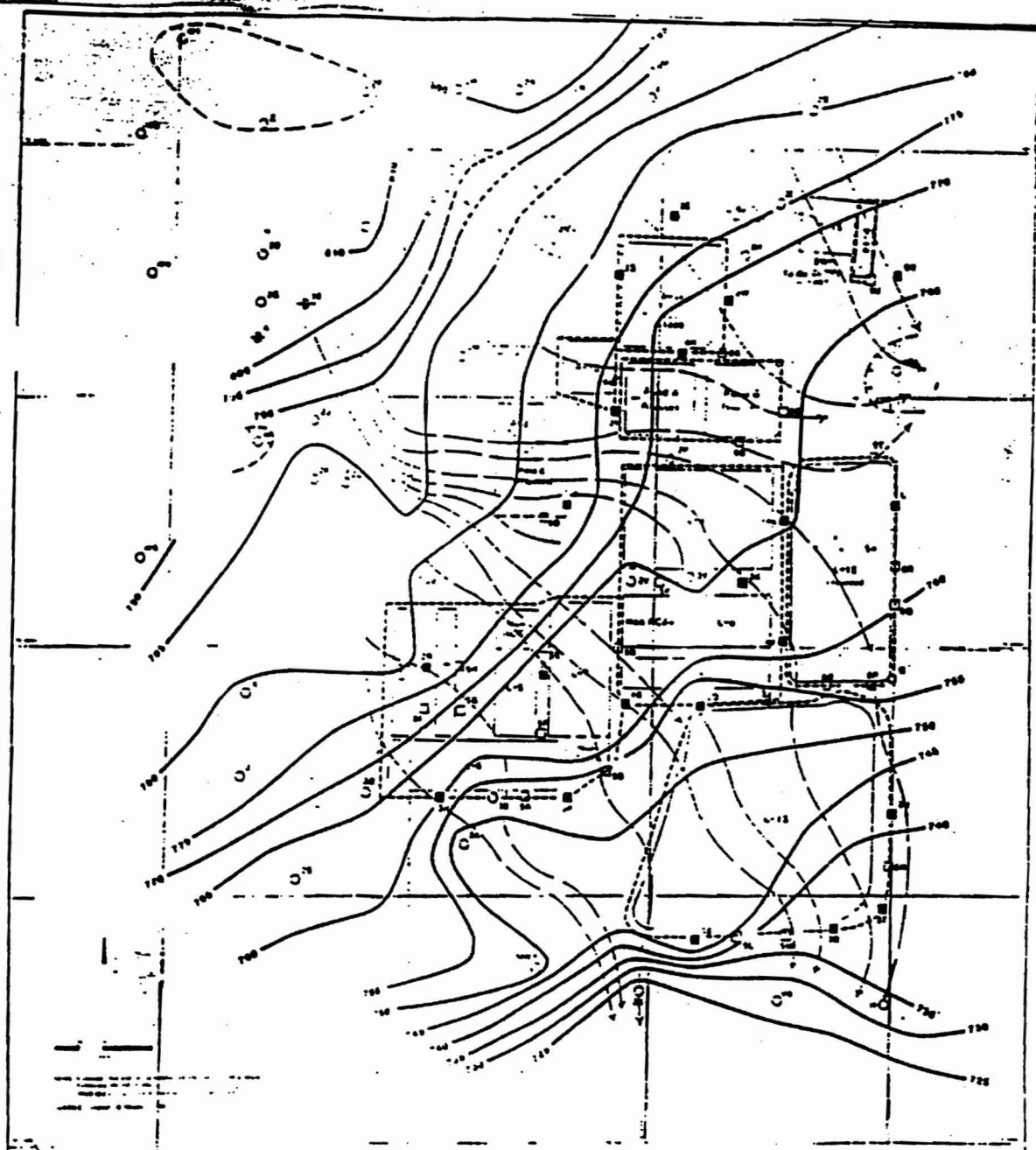
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EXPLANATION

- | | | |
|---|--|--|
| ○ Existing Well Description -
Water Level Monitoring | ● Pond Description | ○ Approximate Location
of Proposed Lake |
| ■ Existing Well Description -
Proposed Detection Monitoring
Station | — 100' - 120' - 140' - 160' - 180' - 200' - 220' - 240' - 260' - 280' - 300' - 320' - 340' - 360' - 380' - 400' - 420' - 440' - 460' - 480' - 500' - 520' - 540' - 560' - 580' - 600' - 620' - 640' - 660' - 680' - 700' - 720' - 740' - 760' - 780' - 800' - 820' - 840' - 860' - 880' - 900' - 920' - 940' - 960' - 980' - 1000' | — Level 2 Flow Line |
| □ Proposed Additional Detection
Monitoring Station | — 100' - 120' - 140' - 160' - 180' - 200' - 220' - 240' - 260' - 280' - 300' - 320' - 340' - 360' - 380' - 400' - 420' - 440' - 460' - 480' - 500' - 520' - 540' - 560' - 580' - 600' - 620' - 640' - 660' - 680' - 700' - 720' - 740' - 760' - 780' - 800' - 820' - 840' - 860' - 880' - 900' - 920' - 940' - 960' - 980' - 1000' | |
| ◆ Proposed Background Water
Quality Monitoring Well | — 100' - 120' - 140' - 160' - 180' - 200' - 220' - 240' - 260' - 280' - 300' - 320' - 340' - 360' - 380' - 400' - 420' - 440' - 460' - 480' - 500' - 520' - 540' - 560' - 580' - 600' - 620' - 640' - 660' - 680' - 700' - 720' - 740' - 760' - 780' - 800' - 820' - 840' - 860' - 880' - 900' - 920' - 940' - 960' - 980' - 1000' | |

PLATE 2
PROPOSED LEVEL 2 DETECTION
MONITORING NETWORK AND WATER
LEVEL CONTOURS (SELAN MEMBER)

TABLE 1
MONITORING WELL DATA

Well No. (a)	Location		Elevation (ft) [b]	Well Depth (ft) [c]	Screened Interval (ft) [c]	Filter Interval (ft) [c]	Anticipated Post-Closure Monitoring
Eastings	Northings						
PCB LANDFILL UNIT L-5							
Proposed:							
SE-1	-1455	1000	950	196	176-196	173-196	yes
SE-2	-1460	1000	950	214	205-214	202-214	yes
PCB LANDFILL UNIT L-7							
Proposed:							
SB-2	-1180	500	950	227	221-227	218-227	yes
SC-1	-1140	550	950	209	186-209	183-209	yes
PCB LANDFILL UNIT L-9							
Existing:							
2Qb-1	-806.27	766.87	953.90	202.50	187.5-202.5	186.5-203.4	yes
2Q-2	-807.00	761.00	953.66	229.60	224.6-229.6	219.5-232.5	yes
PCB LANDFILL UNIT L-13							
Existing:							
3S-1	-814.04	-172.11	932.92	193.30	183.3-193.3	182.0-194.0	yes
3S-2	-823.92	-172.99	932.44	216.70	206.7-216.7	205.5-218.1	yes
3Q-1	-231.61	-130.11	969.63	232.70	222.7-232.7	221.5-234.4	yes
3Q-2	-239.04	-140.09	969.50	258.20	248.2-258.2	247.2-259.2	yes
3Ta-1	-37.05	-50.35	972.31	238.30	228.3-238.3	227.1-238.3	yes
3T-2	-47.55	-46.85	972.29	265.30	253.3-265.3	255.3-265.9	yes
2Ua-1	-7.24	346.79	972.80	235.20	220.2-235.2	219.3-235.2	yes
2U-2	-6.24	337.54	972.97	265.70	260.7-265.7	255.2-267.2	yes
Proposed:							
5L-1	-670	-155	935	206	180-206	177-206	yes
5L-2	-670	-150	935	224	214-224	211-224	yes
5M-1	-430	-145	935	206	185-206	182-206	yes
5M-2	-430	-150	935	230	214-230	211-230	yes
5N-1	-10	100	969	235	222-235	219-235	yes
5N-2	-15	100	969	264	243-264	240-264	yes
Uogradient							
Existing:							
2	-2651.87	2208.92	951.14	196.10	156.1-196.1	151.1-201.8	yes
3B-1	-2461.10	2361.60	947.37	156.90	146.9-156.9	145.7-158.7	yes
3B-2	-2461.10	2361.60	947.37	185.20	180.2-185.2	178.8-186.9	yes

NOTES:

- [a] 1. Denotes Level 1 Selah
- 2. Denotes Level 2 Selah
- [b] Top of Casing
- [c] Measured from Top of Casing; actual dimensions of new wells subject to field modification.

FACT SHEET

Draft Approval to Dispose of Polychlorinated Biphenyls (PCBs)

Issued to

Chem-Security Systems, Inc.
Arlington, Oregon

by

U.S. Environmental Protection Agency Region 10

1. Background

Section 6(e)(1)(A) of the Toxic Substances Control Act (TSCA) required that the Environmental Protection Agency (EPA) promulgate rules for the disposal of polychlorinated biphenyls (PCBs). The rules implementing section 6(e)(1)(A) were published in the Federal Register of May 31, 1979, (44 FR 31514) and recodified in the Federal Register of May 6, 1982, (47 FR 19527). Those rules require, among other things, that various types of PCBs and PCB Articles be disposed of in EPA-approved landfills (40 CFR §761.75), incinerators (40 CFR 761.70), high efficiency boilers (40 CFR §761.60), or by alternative methods (40 CFR 761.60(e) that demonstrate a level of performance equivalent to EPA-approved incinerators or high efficiency boilers.

2. Activity Being Proposed for Approval

Chem-Security System, Inc.'s (CSSI) Arlington, Oregon, facility is located in Gilliam County, approximately 12 road miles from the town of Arlington. The site is remote from any residential, commercial, or industrial development; the nearest residence (excluding the on-site residence occupied by a CSSI employee) being about 1 mile west of the western site boundary.

A portion of CSSI's 320 acre tract is being proposed for renewal of approval for PCB disposal activity, most of it lying on a plateau at an elevation of 925 feet, mean sea level. The main site office is located in Alkali Canyon, along Cedar Springs Road. The facility provides PCB storage and disposal services. The facility has operated since 1978 under a federal PCB disposal approval. PCB wastes that cannot be disposed at the facility are stored temporarily at the facility and then shipped off-site for treatment or disposal.

The units for PCB disposal at the facility include the following landfills:

- Landfill Unit L-5 - undergoing closure activities;
- Landfill Unit L-7 - receiving PCB wastes;
- Landfill Unit L-9 - receiving PCB wastes;
- Landfill Unit L-13
 - Cells 1 and 2 - receiving PCB wastes; and,
 - Cells 3, 4, 5, and 6 - under construction for future receipt of PCB wastes.

This approval is proposed to be issued for a term of 5 years. The approval will address all aspects of the PCB disposal activity at the site, including receipt of waste, construction, operation, monitoring, closure, and post-closure care. During the term of this approval some of the landfill units will undergo final closure.

3. Approval Process

EPA Region 10 (hereafter, referred to as EPA) has determined that sufficient information has been provided by Chem-Security Systems, Inc., to issue a draft approval for public comment. The following steps will now be undertaken to complete the approval process:

- EPA has prepared a Draft Approval and a Fact Sheet. The Administrative Record, which consists of the Approval Application, the Draft Approval, Fact Sheet, and documents relating to the draft approval will be available for public comment for a period of thirty (30) days.
- The Administrative Record may be reviewed at the offices of either the Oregon Department of Environmental Quality in Portland, Oregon or the Environmental Protection Agency in Seattle, Washington. A copy of the Draft Approval and Fact Sheet may be reviewed in the Arlington Oregon Public Library. The attached Public Notice includes the addresses of these repositories and the dates of the public comment period.
- During the thirty (30) day comment period, anyone may submit written comments to EPA at the address listed on the attached Public Notice. Any person wishing to comment at the Public Hearing will have an opportunity to do so. In addition, a Public Notice of the opportunity to comment on the Draft Approval and announcing the Public Meeting/Public Hearing will appear in local newspapers on or before September 18, 1987.

- The Public Hearing for this Draft Approval is scheduled on October 6, 1987, at the Arlington, Oregon Elementary School Cafeteria. The hearing will be preceded by a Public Meeting. The public meeting will cover both the PCB approval and the Resource Conservation and Recovery Act (RCRA) permit. The public notice for the RCRA aspect of the meeting was published in August 1987. The public hearing, where you may submit or present formal testimony, will immediately follow the public meeting.
- All written comments received by EPA during the thirty (30) day comment period will be responded to in writing and will be considered prior to the final decision regarding approval issuance. The EPA may issue the approval as proposed, issue a modified approval, or deny the approval.

4. Basis for Approval Conditions

The approval sets forth the conditions for meeting the technical requirements under 40 CFR §761.75(b) for approval of a chemical waste landfill for PCB disposal. In addition to these specific technical requirements, other requirements have been included in the approval pursuant to 40 CFR §761.75(c)(3)(ii). Under 40 CFR §761.75(c)(3)(ii) the EPA Regional Administrator has broad authority to require other approval conditions which he determines are necessary to protect human health and the environment. The approval also includes language under condition I., necessary for the administration of the approval (i.e., severability of permit conditions, emphasizing that compliance with approval does not constitute a defense to provisions of regulatory requirements outside of the approval, protection of EPA and its employees from personal liability due to events related to the PCB landfill management), also referred to as boiler plate language. The remainder of this Fact Sheet summarizes the regulatory requirements applicable to this approval under 40 CFR §761.75 and the conditions designated in the approval for meeting them.

(1) Chemical Waste Landfill Location and Design Requirements (Section §761.75(b)(1-5))

(a) Soils (Section 761.75(b)(1))

REQUIREMENT--The landfill site shall be located in thick, relatively impermeable formations such as large-area clay pans. Where this is not possible, the soil shall have high clay and silt content meeting designated requirements for thickness and physical properties (e.g., permeability).

DETERMINATION--These requirements will be met for all existing landfills as described in approval condition III.A(4). New landfill requirements are covered in approval conditions III.B(4), III.B(5), and III.B(6).

(b) Synthetic Membrane Liners (Section 761.75(b)(2))

REQUIREMENT--Synthetic membrane liners shall be used when the hydrologic or geologic conditions at the landfill require such a liner.

DETERMINATION--The hydrologic or geologic conditions at the landfill do not require such a liner based on Section 761.75(b)(2). It is EPA's position that all new PCB landfills be constructed and operated in accordance with the minimum technology standards under RCRA (requiring double liners and leachate and leak collection and removal systems) to further minimize the risk to health and the environment. EPA is imposing this requirement through 761.75(c)(3)(ii), which authorizes the inclusion of other requirements or provisions in the approval that the Regional Administrator finds are necessary to ensure that operation of the chemical landfill does not present an unreasonable risk to health or the environment. In respect to this application this would apply to Landfill unit L-13. This requirement will be met as described in approval conditions III.B(4), III.B(5), and III.B(6).

(c) Hydrologic Conditions (Section 761.75(b)(3))

REQUIREMENT--The bottom of the landfill shall be above the historical high groundwater table. Floodplains, shorelands, and groundwater recharge areas shall be avoided. There shall be no hydraulic connection between the site and standing or flowing surface water. The site shall have monitoring wells and leachate collection. The bottom of the landfill liner system or natural in-place soil barrier shall be at least fifty feet from the historical high water table.

DETERMINATION--The applicant has demonstrated in its application that the above locational requirements have been met for the PCB landfill units at the site. Requirements for groundwater monitoring wells and a leachate collection system will be met as described in approval conditions III.A(4), III.A(5), III.B(4), III.B(5), III.B(7), III.B(9), III.B(10), and V.

(d) Flood Protection (Section 761.75(b)(4))

REQUIREMENT--If the landfill site is above the 100 year floodwater elevation, the operators shall provide diversion structures capable of diverting all of the surface water runoff from a 24-hour, 25-year storm.

DETERMINATION--The applicant has demonstrated in its application that the landfill site is above the 100 year floodwater elevation. Requirements for diversion structures will be met as described in approval conditions II.G(1), III.A(4), III.A(5), III.B(4), III.B(5), III.B(7), and IV.

(e) Topography (Section 761.75(b)(5))

REQUIREMENT--The landfill site shall be located in an area of low to moderate relief to minimize erosion and to help prevent landslides or slumping.

DETERMINATION--The applicant has demonstrated compliance with this requirement in their application.

(f) Monitoring Systems (§761.75(b)(6))

(i) Water Sampling

REQUIREMENT--Collection of baseline data from groundwater and surface water from the disposal site.

DETERMINATION--Baseline groundwater monitoring data has been collected for the site and provided to the Agency in meeting the requirements of past PCB approvals and through the RCRA permit application. A surface watercourse is not available nearby for monitoring purposes.

(ii) Groundwater Monitoring Wells

REQUIREMENT--Specification for a minimum of three wells for soil conditions which are homogenous, impervious, and sloping in one direction. Also specification for well construction and sampling.

DETERMINATION--The concepts of homogenous, impervious, and sloping in one direction are simplistic at best for describing any actual site situation. Even if it could be determined that the site strictly met these requirements, a rule of thumb of using three wells is not adequate for adapting a groundwater monitoring program to meet site specific hydrogeologic conditions. It is EPA's position that for the groundwater monitoring program to be adequately adapted to detect and address releases from the landfills it must be designed and operated in accordance with the provisions of 40 CFR Part 270.14(c). EPA is imposing this requirement through 40 CFR §761.75(c)(3)(ii), which authorizes the inclusion of other requirements or provisions in the approval that the Regional Administrator finds are necessary to ensure that operation of the chemical landfill does not present an unreasonable risk to health or the environment. These requirements will be met as described in approval condition V.

111. Water Analysis

REQUIREMENT--All surface or groundwater samples are to be analyzed for PCBs, pH, specific conductance, and chlorinated organics and records of sampling and analysis shall be maintained.

DETERMINATION--EPA Method 9020 for total organic halides will be utilized as an indication of the parameter chlorinated organics, as there is not a specific individual analytical method for determination of this parameter. This requirement will be met as described in approval conditions II.I, II.J, II.L, III.A(5), III.B(7), III.B(8), III.B(9) and V.

(g) Leachate Collection (Section 761.41(b)(7))

REQUIREMENT--A leachate collection monitoring system shall be installed above the chemical waste landfill. The leachate shall be monitored monthly for quantity and physiochemical characteristics, indefinitely. The leachate shall be either treated to acceptable limits for discharge in accordance with a state or Federal permit or disposed of by another state or Federally approved method.

DETERMINATION--This requirement is partially waived, as the requirement for a monitoring frequency of monthly over the entire monitoring period. A monitoring frequency of monthly for landfill units L-5, L-7, and L-9 over their active life and for landfill unit L-5, L-7, L-9, and L-13 semiannually for first 10 years of post closure, and annually over the last 10 years of post closure is deemed adequate. A monitoring frequency of weekly for landfill unit L-13 during its active life, due to its double liner bottom design, enabling maximization of leachate collection efficiency, and the need to minimize the head on the liner, is deemed necessary. EPA is imposing this additional requirement through 40 CFR §761.75(c)(3)(ii), which authorizes the inclusion of other requirements or provisions in the approval that the Regional Administrator finds are necessary to ensure that operation of the chemical landfill does not present an unreasonable risk to health or the environment. These requirements will be met as described in approval conditions II.I, II.J, II.L, III.A(5), III.B(7), III.B(8), III.B(9).

(2) Chemical Waste Landfill Operations (Section 761.75(b)(8)(i-iv))

(a) PCB Handling (Section 761.75(b)(8)(i))

REQUIREMENT--PCBs shall be handled in a manner to prevent damage to containers and must be segregated from wastes which are not chemically compatible with the PCBs or PCB Items.

DETERMINATION--This requirement will be met as described in approval conditions II.C, II.G, III.A(5), III.A(6), and III.B(7).

(b) Operation Plan (Section 761.75(b)(8)(ii))

REQUIREMENT--An operation plan shall be submitted to EPA for approval that includes detailed explanations of the procedures to be used for recordkeeping, surface water handling procedures, excavation and backfilling, waste segregation burial coordinates, vehicle and equipment movement, use of roadways, leachate collection systems, monitoring wells, environmental emergency contingency plans and security measures to protect against vandalism and unauthorized waste placements. Also, if the facility is to be used to dispose of liquid wastes containing between 50 parts per million (ppm) and 500 ppm PCB, the operations plan must include procedures to determine that liquid PCBs to be disposed at the landfill do not exceed 500 ppm PCB.

DETERMINATION--The applicant has submitted an operating plan to address these requirements. In some instances the Agency has added language in the approval which goes beyond that specified in the applicant's operating plan. This has been done to supplement, clarify, or change the wording in the operating plan. In this way, some portions of the operating plan have been modified and the applicant will be required to comply with the modified portions, rather than the original version. In addition, to the elements specifically identified under this requirement for inclusion in the operation plan, EPA has also included requirements for the following:

- To address adequate PCB waste acceptance procedures (e.g., to assure PCB waste that contains free liquids, or inadequately stabilized are not disposed);
- To address training of employees who handle PCB waste to assure they are trained in PCB waste management, safety, and emergency procedures;

- To address proper closure of PCB units in a manner that minimizes the need for further maintenance and controls, minimizes or eliminates to the extent necessary to protect human health and the environment escape of PCB leachate, contaminated run-off to the ground or surface waters, or to the atmosphere;
- To address post-closure maintenance of the PCB landfills;
- To set aside funds for closure and post-closure activities;
- To assure that leaks in landfill unit L-13's double liner system are promptly detected and addressed;
- To assure that the landfill and other operations critical to landfill operation are inspected on a frequent enough basis to detect malfunctions and deterioration, operator errors, and discharges which may be causing or lead to release of PCBs to the environment or a threat to human health; and,
- To assure that the facility is adequately designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of PCBs to air, soil, or surface water which could threaten human health or the environment.

EPA is imposing these additional requirements through 40 CFR §761.75(c)(3)(ii), which authorizes the inclusion of other requirements or provisions in the approval that the Regional Administrator finds are necessary to ensure that operation of the chemical landfill does not present an unreasonable risk to health or the environment. These requirements will be met as described in approval conditions II., III., IV. and V.

(c) Ignitable Wastes (Section 761.75(b)(8)(iii))

REQUIREMENT--Liquid ignitable wastes shall not be disposed in chemical waste landfills.

DETERMINATION--This requirement shall be met for that portion of trenches which are approved for PCB disposal. For Landfill units L-7 and L-9, a substantially impermeable dike, having a width of at least 10 feet has been placed between the PCB disposal area and the remainder of the trench, where liquid ignitable wastes may have been placed in the past. This dike shall continue to be constructed in the landfill units up to the elevation of final waste placement. This requirement will be met as described in approval conditions III.A(2)(a), III.A(4), III.A(5), III.B(2)(a), and III.B(7).

(d) Records Maintenance (Section 761.75(b)(8)(iv))

REQUIREMENT--Records shall be maintained for all PCB disposal operations and must include three-dimensional burial coordinates. Additional records must be maintained as required under §761.180.

DETERMINATION--This requirement will be met as described in approval conditions II.C, II.I, III.A(5), and III.B(7).

(3) Supporting Facilities (Section 761.75(b)(9))

(a) Fencing (Section 761.75(b)(9)(i))

REQUIREMENT--A six-foot woven wire fence shall be provided around the perimeter of the site.

DETERMINATION--This requirement will be met as described in approval condition II.D.

(b) Road Maintenance (Section 761.75(b)(9)(ii))

REQUIREMENT--Access and on-site roads shall be maintained in a safe manner.

DETERMINATION--This requirement will be met as described in approval conditions II.E., and II.G..

(c) Site Operations (Section 761.75(b)(9)(iii))

REQUIREMENT--The site shall be operated and maintained in a safe manner.

DETERMINATION--This requirement will be met as described in approval conditions II.E., II.G., III.(A)(5), and III.B(7).